Scribes and Correctors of the Codex Sinaiticus

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British Museum, 1938 - 112 pages

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INTRODUCTION

Condition on arrival

THE Codex Sinaiticus, at the moment of its arrival in the British Museum on December 27th, 1933, still presented much the same appearance as when it first met the gaze of Tischendorf in the Convent of St. Catherine on Mount Sinai—a large pile of loose quires and leaves, lacking both beginning and end, and bereft of covers and binding (Fig. 1). One change was indeed noticeable. Tischendorf, it will be remembered, when he rediscovered the major part of the manuscript in 1859, saw it wrapped in a red cloth, which still served as its covering when Professor and Mrs. Kirsopp Lake visited St. Petersburg in 1908 to prepare the facsimile edition published by the Oxford University Press.[1] This, the one visible relic of its long sojourn on Sinai, no longer accompanied the Codex, and of the outward reminders of its peregrinations there remained only the red and gold japanned tin box within which the bundle of leaves reposed in the Imperial Library.

Need for rebinding

It was obvious that with the transference of the Codex from its comparatively inaccessible Russian domicile to a country which has long been a centre of Biblical studies, some method of preservation must be adopted which would make it easy to consult without inconvenience or risk of damage, and shortly after the final success of the appeal which secured it for the national collection the Trustees resolved that the book (now numbered Additional MS. 43725) should be bound, and that this delicate task should be entrusted to Mr. Douglas Cockerell. At the same time, since the process of binding would present such an opportunity for examining the book, both from the technical and palaeographical standpoint, as would never occur again, it was decided that the entire description given in Tischendorf's great edition should be compared afresh with the original. Binding and collation proceeded hand-in-hand throughout the summer and autumn of 1935, and the present study marks the conclusion of these labours and attempts to reproduce the results of this twofold inquiry. The word 'collation' is in some respects an exaggeration; what has been done is the comparison of all the critical notes in Tischendorf's commentary (Vol. I in the four-volume *editio princeps* of 1862) with the

Examination of the MS.

[1] N.T., p. vi, note 1: 'In which it is still wrapped, and, I hope, always will be.'

manuscript. In the process we have occasionally noticed corrections which Tischendorf had missed, and at various places we have had the advantage of examining and elucidating obscurities under the ultra-violet lamp. But we have made no fresh collation in the sense of a minute perusal of the entire text. Some day, perhaps, this task will be carried out by specialists in textual criticism; but we cannot refrain from recording here at the outset our unbounded admiration for Tischendorf as a collator. First impressions, after a few pages had been examined, were that little remained for a reviser to do; and subsequent experience has in general amply confirmed this. The smallest spot of ink, the slightest roughness of surface betraying an erasure, caught his keen eye; and his talent is seen in its highest degree in those passages where all the original ink has vanished, leaving only the track where it has bitten into the surface of the vellum. All the same, Tischendorf was only human, and now and again either he or his printers have been guilty of some small omission or misunderstanding. The sum total of these points is fairly considerable; but obviously they cannot be reproduced in full here, and they have accordingly been placed at the disposal of the editors of the Cambridge Septuagint and the Oxford edition of the New Testament respectively. By a happy coincidence, the former of these monumental undertakings has just reached the very part of the Old Testament covered by the Codex Sinaiticus,[1] while in the case of the Oxford enterprise only the first volume, the Gospel of Mark, has appeared. Hence for the whole of the Old Testament, and for practically the whole of the New Testament, these editions will be able to use the most recent investigations on the manuscript.

Tischendorf as collator

Further study necessary

Throughout this work, whenever references are made to individual leaves of the manuscript, the numeration used is that of Professor Kirsopp Lake's facsimile, as being the only complete edition of all the surviving portions both in the Museum and elsewhere. How this numeration compares with that of Tischendorf and with the British Museum pencil foliation will be found by reference to the Table of Concordance on pp. 94–112 below.

[1] The only part of the Codex Sinaiticus represented in the published portions of the Cambridge Septuagint is the single leaf containing 1 Chron. ix. 27—xi. 22. In this passage, incidentally, we have no additions or corrections to make to Tischendorf's collation.

I. ORIGINAL CONTENTS OF THE OLD TESTAMENT

Method of calculation

THE portions of the Old Testament covered by the Codex in its present condition are specified in the table printed on pp. 94–112 below; here an attempt will be made to determine the probable contents of the missing sections, namely the beginning of the manuscript preceding the intrusive section of 1 Chronicles, and the seven quires lost between Lamentations ii. 20 and Joel i. 1. For this purpose we have compared the Codex with the Vaticanus and the Alexandrinus, both of which contain the Old Testament almost complete. By taking the books which are extant in all three manuscripts and contrasting the space they occupy in each, we can calculate the probable contents of the lost portions of the Sinaiticus, the two other manuscripts providing a double check. We would, however, emphasize the number of unanswerable questions—whether the lost quires of the Sinaiticus all uniformly consisted of eight leaves; whether certain passages such as the long genealogical tables were written continuously, or with one item to each line, as frequently elsewhere in the manuscript; how much space was left blank at the end of each book; and so on. The combined effect of variations in these particulars might easily throw the estimate out by half a dozen pages or more; but as it happens the results agree closely enough with expectations to justify their publication here.

1. THE LOST INITIAL QUIRES

The intrusive section of 1 Chronicles

Before we consider the contents of the lost beginning it is necessary to explain the anomaly with which the extant portion of the manuscript opens. The first five consecutive leaves contain 1 Chronicles ix. 27—xix. 17, but at the end of this passage, in line 26 of the last column on the verso of the fifth leaf, the text skips without warning into the midst of 2 Esdras ix. 9, and continues normally from that point onwards. In the margin, against the last word of the page in which the change-over occurs (see Fig. 2), a scribe of perhaps the seventh or eighth century (certainly not the corrector C^a, as is generally stated) has written three crosses and, in the vacant space below the text, the following note:

ⳓⳓⳓ
ⳔⳔⳔ μεχρι του σημειου των τριων σταυρων εστιν το τελος των επτα φυλλων

των περισσων και μη οντων του Εσδρα[1] ('At the sign of the three crosses is the end of the seven leaves which are superfluous and not part of Esdras'). Actually, however, these crosses should have been set against line 26, where indeed there can be seen traces of an earlier but obliterated cross. The reason for the transference of the sign to the end of the page is obscure, unless it was a desire to give a literal interpretation to the round expression 'seven leaves'.

How to be explained

Such an extraordinary intrusion of 1 Chronicles into 2 Esdras is probably to be explained, as Westcott was the first to suggest, by the transposition of two quires in the exemplar from which this portion of the Sinaiticus was copied.[2] Exactly when the fault was discovered it is difficult to say. Certainly neither the original scribe A, in revising the manuscript, nor his colleague, scribe D, who again checked the text, noticed anything amiss, for not only did they both introduce a number of corrections, but the latter also placed the superscription '2 Esdras' over the text of what is really 1 Chronicles. This, however, as Tischendorf acutely observed,[3] merely proves that both revisers were collating the newly written manuscript with the exemplar. On the other hand, the corrector C^a, who revised almost the entire manuscript, has left not the smallest trace of his activity throughout the five extant 'superfluous' leaves,[4] though when the text switches over to 2 Esdras his hand appears almost simultaneously. C^a's near contemporary, C^{b1}, takes an exactly similar course. Thus by the seventh century at latest the dislocation had been observed, and from that time or shortly afterwards we have the note which states the fact explicitly.

When and by whom noticed

The intrusive leaves 'superfluous'

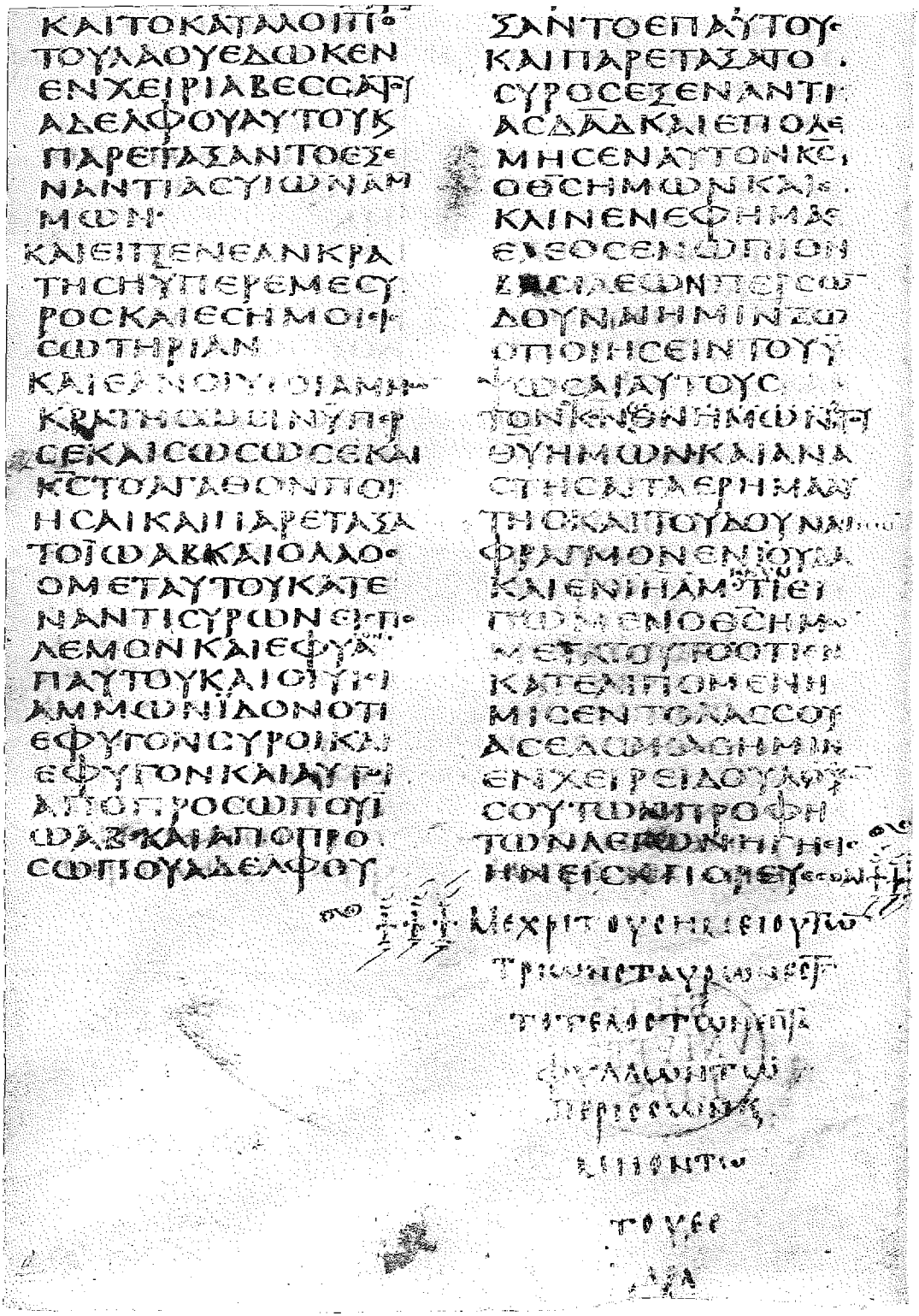
But the full significance of this note, as well as the absence of C^a and C^{b1} corrections throughout the leaves in question, has not hitherto been fully appreciated; for the word περισσων, 'superfluous', not only means that the leaves were out of place in 2 Esdras—that is sufficiently stated by the words και μη οντων του

[1] Swete at 2 Esdr. ix. 9 prints μεχρι τουτου σημειου, which he elsewhere amends (*Introduction to the Old Testament in Greek*, 1900, p. 131) to μέχρι τούτου [τοῦ] σημείου κτλ.

[2] Cf. Swete, ibid., p. 131, and the excellent discussion by H. St. J. Thackeray in Hastings's *Dictionary of the Bible*, art. Esdras, First Book of. The explanation of Dr. Gwynn in Wace's *Apocrypha* (*The Speaker's Commentary*), vol. i, p. 2, that the scribe, after writing the genealogy of Ezra in 2 Esdras vii. 1–5, accidentally passed on to the genealogies of the high priests in 1 Chronicles, is very improbable.

[3] *Codex Friderico-Augustanus*, p. 10.

[4] The corrections in 1 Chron. assigned to C^a by Swete are really by scribe D.



O.T. 7b

NOTE ON INTERPOLATION OF 1 CHRONICLES

Εσδρα—but implies that the text which they contain *had already appeared, and in its rightful place, in 1 Chronicles.* Whether the book of 1 Chronicles was complete (and consequently the leaves in the middle of 2 Esdras 'superfluous') from the start is more difficult to say. In the case of the exemplar itself, it is evident that the transposition of a quire of 1 Chronicles into the heart of 2 Esdras must have left a corresponding gap in the middle of 1 Chronicles. When and by what means this gap was detected, or if it occasioned a similar hiatus in the Sinaiticus, is a moot point. The failure of both the revisers to detect the intrusion in 2 Esdras does not create confidence in their powers of observation; they at least would have been equally capable of passing a hiatus in 1 Chronicles. It is nevertheless probable that the gap, if it ever existed,[1] was filled almost at once, for the following calculations suggest that 1 Chronicles was complete from the first in its proper place.

Comparison with the Vaticanus and Alexandrinus

We now give in tabular form the amount of space occupied in the three codices by the books[2] fully extant in the Codex Sinaiticus:

BOOKS	NUMBER OF LEAVES IN :		
	ℵ	A	B
Esther	5·875	6·0	7·1$\dot{6}$
Tobit	6·875	5·25	7·1$\dot{6}$
Judith	9·0	8·75	11·$\dot{3}$
1 Maccabees	17·875	21·75	(omitted)
4 Maccabees	8·0	9·75	(omitted)
Isaiah	26·375	28·75	30·$\dot{6}$
Jeremiah	28·25	30·75	31·$\dot{6}$
Minor Prophets from Joel to Malachi	14·0	14·75	17·1$\dot{6}$
New Testament,[3] Matt. xxv. 6—end of Rev.	119·875	134·75	..
„ „ Matt. i. 1—Hebrews ix. 14 (excluding Pastoral Epistles, which are lost from B)	118·0	..	142·0

It follows from the above calculations, therefore, that:

1 leaf of A corresponds to 0·9 leaves of ℵ.

1 leaf of B corresponds to 0·84 leaves of ℵ.

[1] The lacuna may have been observed at once, or 1 Chronicles may have been copied from another exemplar.

[2] The poetical books of the Old Testament have been excluded, as the stichometric method of writing makes comparison impossible.

[3] In the Alexandrinus space occupied by the Capitula to the Gospels is excluded.

Inferred contents of Sinaiticus

With the aid of these figures the lost beginning of the manuscript can be reconstructed as follows:

	LEAVES IN A	LEAVES IN ℵ BY CALCULATION FROM A	LEAVES IN B	LEAVES IN ℵ BY CALCULATION FROM B
Genesis—4 Kings . . .	240·0	216·0	252·8$\dot{3}$	212·38
1 Chronicles	15·5	13·95	18·6$\dot{6}$	15·68
2 Chronicles	20·5	18·45	25·$\dot{3}$	21·28
1 Esdras	9·75	8·775	10·8$\dot{3}$	9·1
2 Esdras i. 1—ix. 9 . .	4·54	4·086	5·3	4·45
Add lost 'superfluous' leaves of Chronicles in ℵ, immediately preceding the present f. 1 .	..	2·0	..	2·0
Total	..	263·261	..	264·89

Checked with the old quire numeration

The Codex Sinaiticus (apart from the fragments of the Pentateuch)[1] now begins with the last leaf of quire 34, the next leaf still bearing the original quire number λε = 35. If we assume that quires 1–34 were all regularly formed of eight leaves apiece, the total number of leaves lost amounts to 271. This is somewhat higher than the estimates based on the other two codices, the Alexandrinus figure being a trifle over 263, the Vaticanus figure practically 265.

There is, however, nothing disconcerting in such a discrepancy, which could easily be accounted for by one or two short quires of 4 or 6 leaves (for which there is ample precedent) in the lost beginning of the manuscript. For present purposes it is more important that the figures reached by calculation should fall thus short, since this makes it all but certain, firstly, that the apocryphal 1 Esdras was included in the manuscript, and secondly, that 1 Chronicles was complete in its proper place in the book, the 'superfluous' leaves being superfluous from the start. For while a discrepancy of 6 or 8 leaves is intelligible, omission of 1 Esdras would raise it to 15 or 16 leaves, and a further omission of 7 leaves in the middle of 1 Chronicles to the wellnigh impossible total of 22 or 23.

1 Esdras certainly included

[1] The fragments of Leviticus from Sinai published by H. Brugsch, *Neue Bruchstücke des Codex Sinaiticus*, Leipzig, 1875, certainly do not belong to our manuscript (cf. J. Rendel Harris, *Biblical Fragments from Mount Sinai*, 1890, p. iv); perhaps they are the fragments reported by P. Gregoriades, Ἡ Ἱερὰ Μονὴ τοῦ Σινᾶ, Jerusalem, 1875, p. 19.

2. THE LOST PROPHETIC BOOKS

Losses in the Minor Prophets

The Codex to-day exhibits a gap of seven whole quires between those numbered 49 and 57, the text breaking off after Lamentations ii. 20, and resuming with the beginning of Joel. Since the scribe is the same on both sides of the lacuna, and no major division between groups of books occurs within it, we may confidently assume the missing quires to have been regularly composed of eight leaves. Hence 56 leaves in all are lost.

Possible contents

To determine the contents of these 56 leaves is not so easy as appears at first sight. Obviously they must have contained the remainder of Lamentations and the two other Major Prophets, Ezekiel and Daniel; also the first three Minor Prophets, Hosea, Amos, and Micah, since the book of Joel is numbered Δ (= 4). Both the Vaticanus and the Alexandrinus, however, insert Baruch and the Epistle of Jeremy between Jeremiah and Lamentations. In the Sinaiticus Lamentations follows immediately upon Jeremiah, but it is, of course, possible that Baruch and the Epistle of Jeremy were included in the volume after Lamentations. Calculation based upon the other two codices gives the following results:

Baruch and the Epistle of Jeremy

BOOKS	IN A	IN B
Lamentations ii. 21—end	1·885	1·742
Baruch	3·0	3·0
Epistle of Jeremy	1·75	1·6̇
Ezekiel	33·0	31·5
Daniel	15·0	14·3̇
Hosea	4·5	4·8̇3̇
Amos	3·5	4·0
Micah	2·5	2·8̇3̇
Total of leaves	65·135	63·8
∴ in ℵ (calculated)	58·62	53·6
Omitting Baruch and Epistle of Jeremy	60·385	59·142
∴ in ℵ (calculated)	54·35	49·69

The Alexandrinus and Vaticanus figures

These figures appear to leave the solution of the problem as far off as ever, none being in conspicuous agreement with the 56 leaves we know to be missing; but closer inspection reveals that the figures for the Alexandrinus are almost certainly too high. Fifteen leaves of the Vaticanus usually hold the same amount of text as fourteen

leaves in the Alexandrinus; yet here it is the Alexandrinus which shows the higher total—65 leaves as against under 64. A partial explanation may perhaps be found in the large amount of space left blank in the Alexandrinus—$\frac{3}{4}$ of a leaf at the end of Daniel—while, of course, there is always the possibility that the scribe may have been writing a slightly larger hand than usual. However that may be, where the figures disagree[1] we can have no hesitation in regarding that based on the Vaticanus as likely to be nearer the truth. Allowing for the inclusion of Baruch and the Epistle of Jeremy, the Vaticanus figure is 53·6 leaves, which is near enough to 56; if, however, the two apocrypha are deducted, the figure falls to below 50, leaving a deficiency which it is difficult to explain.

Probably both included

We may thus conclude that, in all probability, Baruch and the Epistle of Jeremy found a place in the Sinaiticus immediately after Lamentations.

[1] It is perhaps worth noting that the *mean* of the figures based on the Alexandrinus (58·62) and Vaticanus (53·6) is almost exactly right—56·11.

II. CONTENTS OF THE NEW TESTAMENT

1. THE FIRST QUIRE

The two quire-numerations

THE very first leaf of the New Testament faces us with a difficult problem. It is well known that a discrepancy exists between the two quire-numerations of the manuscript.[1] The earliest numeration consists of small letters surmounted by a wavy stroke, in the top left-hand corner of the first page of each quire. Both the form of the letters, which appear to be no later than the text, and their regular placing against the left bounding line of the first column of writing[2] (see Fig. 3) strongly suggest that this numeration is contemporary, although the writer cannot be identified with any of the scribes of the text. This is also the opinion of Lake (N.T., p. xvi; O.T., p. xix). In the New Testament these quire-numbers are all one in advance of what would be expected from the numeration of the Old Testament, whereas the later numeration, in the right-hand top corner, which is ascribed to the eighth century, runs on continuously throughout the Bible. The facts of the case admit of no doubt: the original numeration in the latter part of the Old Testament (quire 60 onwards) is well preserved, the last being quire 72 at the end of Job; in the earlier part of the New Testament the signatures are mostly shorn off, but from 83 onwards they are in general intact—or rather would have been had they not been partially erased, no doubt by the writer of the later numeration, who saw that they conflicted with his own. But the figures are in some cases so imperfectly defaced that they can be read with complete certainty; reckoning back to the beginning of the New Testament we find that the first quire would have been 74, and in fact, faint traces of ΟΔ (= 74) in reddish ink can be seen on the top edge of the first page, standing in exactly the place where the numeral would be expected.[3]

Their disagreement in the N.T.

[1] For the extent and content of each quire see the Tables on pp. 94–112.

[2] The original numeration of the Sarravianus occupies exactly the same position, though in only one case (Quire Ā, on pl. 105 of the facsimile) can this be seen in the reproduction; the original numeration of the Ambrosianus seems to be similarly placed (cf. Ceriani, *Monumenta Sacra et Profana*, iii, 1864, p. x).

[3] This disposes of Tischendorf's suggestion (Prolegomena, p. 10*) that the missing quire might have come between the Gospels and Epistles.

Does this point to a missing quire?

Thus the original numeration allows for a whole quire (no. 73) between the Old and New Testaments as we see them to-day. By about the eighth century, however, the gap had been closed by re-numbering the quires continuously. Of such an anomaly several explanations are possible:

Possible solutions: 1. *A mistake*

(*a*) A simple mistake in the original numeration (so Tischendorf, Prolegomena, p. 10*). But assumption of a mistake is always undesirable; and in this case the Old Testament and New Testament were certainly numbered at different times, since the signatures in the Old Testament are a yellow-brown colour while those of the New Testament have a reddish tint. In such circumstances a mistake becomes difficult to understand.

2. *A lost quire*

(*b*) A whole quire between Job and Matthew has disappeared from the manuscript, and never been replaced. This solution has been widely adopted, usually on the supposition (cf. Lake, O.T., p. xx) that the lost quire contained the Eusebian canon-tables, with, perhaps, the Letter to Carpianus. But it might, of course, have contained some Old Testament apocryphon. The suggestion has even been made that the *Shepherd* of Hermas originally came here, and was later removed to the end of the manuscript. This, however, is absolutely precluded, as Lake has pointed out, both by the length of the *Shepherd* and by the original quire-numeration, which shows that it has always stood in its present position.

The loss of a whole quire could have occurred in various ways: it might, for instance, have been overlooked in binding the volume, or torn out at a later date. But to assume a mistake in binding is no less objectionable than to assume a mistake in numeration, while any serious mutilation of the manuscript at such a comparatively early date is extremely improbable. We therefore advocate a third and apparently novel solution:

3. *A quire allowed for but never written*

(*c*) A single quire (no. 73), intended to contain the Eusebian canon-tables, was allowed for by the numerator of the New Testament quires but was never actually written. This explanation accords fully with the casual way in which the Eusebian apparatus has been added (cf. pp. 36–7 below). It was clearly not in the manuscript from which the Sinaiticus was copied, and had to be specially obtained from another source; the scribe who began to insert it broke off at Matthew § 52, and was succeeded by a colleague, who, though completing the other Gospels, numbered only the first 106

sections of Luke, nos. 107–242 remaining unnumbered down to the present day. With this vital numeration incomplete, the canon-tables themselves may well have been abandoned.

Perhaps meant for the Eusebian tables

This explanation, if correct, would establish the Sinaiticus as the earliest manuscript now extant in which provision, at least, was made for the inclusion of the canon-tables; and it derives considerable support from the analogy of the Codex Alexandrinus, where a simple calculation demonstrates that some extra material (most likely the canon-tables) once stood at the beginning of the New Testament. We know from the early quire-numeration (as also from the fourteenth-century Arabic foliation) that the first 25 leaves of the New Testament are missing,[1] and it has been generally supposed that these contained Matt. i. 1—xxv. 6. This amount of text, however, could not possibly have filled 25 leaves; in fact, utilizing the calculations worked out on p. 3 above, we find $16\frac{1}{2}$ leaves a more correct figure.[2] Thus, even after allowing one extra leaf for the capitula of Matthew, we are left with $7\frac{1}{2}$ leaves to account for. That these contained some Old Testament apocryphal book is improbable in itself, and is in any case ruled out by the early table of contents, written long before the loss of the leaves in question, which passes directly from Ecclesiasticus, at the end of the Old Testament, to Matthew. Hence it is virtually certain that these leaves were occupied by the ten tables of canons (and perhaps the Letter to Carpianus as well), of which, but for an unfortunate accident in the late Middle Ages, they would have been the earliest example to survive.

which were once included in the Alexandrinus

2. THE TRANSITION FROM MARK TO LUKE

A cancelled bifolium

It is well known that in the Sinaiticus the last leaf of Mark and the first leaf of Luke, forming a bifolium in the centre of quire 76, are written by scribe D, presumably to replace an earlier bifolium written by the normal scribe, namely A. Problems are presented in both the evangelists. In Luke the six full columns of text written by

[1] On the quire numeration see E. Maunde Thompson, *Facsimile of the Codex Alexandrinus*, vol. i, p. 8, and on the Arabic numeration, ibid., p. 4.

[2] This discrepancy had actually been noted by B. H. Cowper in his re-edition of Woide (*Novum Testamentum Graece ex antiquissimo codice Alexandrino*, London, 1860, p. vi), but he confined himself to the observation that the numeration of the first extant leaf of the N.T. as f. 26 was 'probably wrong . . . not more than sixteen or seventeen folia are missing'.

D comprise 684+679+698+685+728+681 = 4,155 letters,[1] an average of 692 letters to the column. Such a figure is totally at variance with what we know of A, whose average of letters per column is only 630–40. A new book must always begin at the top of a column, and to suppose that A's version began one column earlier than D's does not mend matters, for seven full columns would give a mean of only 593 letters, well below A's average.

Original contents

Clearly, then, the ordinary text of Luke cannot be fitted into the given space, and the natural conclusion is that A had been guilty of an unusually extensive blunder, either of omission or duplication according as we allow six or seven columns for that part of the Gospel. Six of A's normal columns would contain 3,792 letters, seven would contain 4,424 letters, neither particularly close to the actual figure of 4155. Which is the more probable?

To answer this question we must attack the problem from the other side. The end of Mark as written by D comprises 5,573 letters, filling nine columns and just overflowing into a tenth. How many columns would A have required for the same passage, writing in his normal style? The answer is $\frac{5573}{635}$, almost exactly $8\frac{3}{4}$. The spare quarter of a column would just provide comfortable room for the colophon, and we may provisionally conclude that A finished Mark in nine columns; the beginning of Luke must then have occupied seven, not six, columns, and consequently A must have duplicated a long passage in the course of writing it. This, then, was the error which called for the substitution of a new leaf.

D's dilemma

The above conclusion is fully confirmed by the obvious embarrassment of D. Faced with the task of eliminating nearly half a column of superfluous text from the beginning of Luke, two courses were open to him: to compress the text into one column less or spin it out into one column more. He chose the former, as is clear from the high average content of the six columns of Luke written by him; but by making Luke begin one column later, he was obliged to space out the end of Mark so as to run over into a tenth column, and his efforts to achieve this are clearly visible in the phenomenally reduced contents of the last five columns—598, 556, 605, 598, and 560 letters respectively, numbers which form a striking contrast to the overcrowded columns at the beginning of Luke.

[1] In these calculations *nomina sacra* and numerals are reckoned by the number of letters actually written, but abbreviations, ¯ for -ν, and κ(αί) are expanded.

To sum up: as originally written by A the bifolium contained the usual sixteen columns of writing, nine for the end of Mark, seven for the beginning of Luke, a long passage being erroneously repeated in the latter. D, having to repair the error by re-writing the sheet, stretched the end of Mark to ten columns and compressed the beginning of Luke to six.[1]

The end of Mark

There remains the question of Mark xvi. 9–20, omitted by both the Sinaiticus and Vaticanus. Is it not possible that A included these verses, and that the leaf was re-written because it was decided to omit them? Such an idea in itself seems alien to the spirit of the manuscript, and in any case a very simple calculation disposes of the suggestion, unless some quite unjustified assumptions are made. In the first place, as pointed out above, the difficulty lies, not in Mark, but in Luke. Secondly, Mark xvi. 9–20 contains 971 letters;[2] if included by A at the end of the Gospel, the whole would have occupied over $10\frac{1}{3}$ columns, leaving only five complete columns for the beginning of Luke. To get room for Mark xvi. 9–20 we must therefore assume that A, instead of duplicating nearly half a column of Luke, omitted nearly one and a half columns; and that the cancel-leaf was written for two entirely separate motives, (*a*) because it had been decided to omit Mark xvi. 9–20, (*b*) because it was desired to re-write Luke and include the omitted passage. But such a coincidence of reasons is plainly improbable.

No space for Mk. xvi. 9–20 in the cancelled leaf

Significance has been attached to the fact that the cancel-leaf in the Sinaiticus, omitting Mark xvi. 9–20, is written by the very scribe whom Tischendorf recognized as the writer of the New Testament in the Codex Vaticanus. 'The coincidence is a curious one, and many people, naturally enough, refuse to believe that it is accidental. They say we have the scribe of B twice over for the omission, and not two separate authorities' (J. Rendel Harris, *Stichometry*, 1893, p. 73). But the grounds for this conclusion have been cut away by the demonstration that all D's affinities are with the *other* scribe of the Vaticanus (cf. pp. 87–90 below).

[1] A similar explanation may underlie the cancel-leaf by D in the Pauline epistles (N.T. 91). The first seven columns contain 713, 696, 689, 629, 682, 692, 675 letters, far above A's average; seemingly D had to find space for a long passage omitted by A. In the eighth column, his task accomplished, D drops to 582 letters.

[2] Taken from the Textus Receptus. A. C. Clark, *The Primitive Text of the Gospels and Acts*, 1914, p. 66, gives 964 letters, from Souter's text.

3. THE LAST VERSE OF ST. JOHN (xxi. 25)

Problem of John xxi. 25

THIS passage raises points of such interest[1] that it merits separate treatment, especially as the evidence of the manuscript is now for the first time fully revealed. Tischendorf, it is well known, held that the original writer of the text, scribe A, stopped at the end of John xxi. 24, omitting not only verse 25, but the subscription and coronis as well,[2] and that all these were added by an early corrector, to be identified with scribe D. Tischendorf's reasons for supposing these additions to have been made by another hand were: (1) the different colour of the ink, (2) a greater delicacy of script, and (3) minute differences in the shapes of certain letters. And he concluded that verse 25 was lacking in the exemplar, and was added by scribe D when revising the manuscript with the aid of a copy which did contain it. Scrivener, however, (*A Full Collation of the Codex Sinaiticus*, 1864, pp. lix–lx) seriously questions the validity of these arguments, and quotes Tregelles's opinion that the apparent change of hand was due to the scribe taking a fresh dip of ink. Lake (N.T., p. xx) substantially accepts this view.

Undoubtedly written by the scribe of the text

The first thing to observe is that verse 25 was undoubtedly penned by the same hand as the rest of the page, that is, by scribe A. For ample proof we may point to the shape of the coronis (Fig. 3) and the spelling Ἰωάννης with double nu in the subscription. Nevertheless, the change of ink noted by Tischendorf cannot be denied; the tint which appears in verse 25 is unparalleled elsewhere on the same page, nor can it be explained merely as the result of a newly filled pen.[3] The solution of this apparent conflict of evidence becomes clear when the manuscript is closely examined, especially by ultra-violet light; for underneath verse 25 and in the left-hand margin are distinct traces of an earlier coronis and subscription (Fig. 3) obviously written at the time when the text ended with verse 24. Later on, however, the same scribe washed the vellum clean and added the concluding verse, repeating the coronis and subscription in a correspondingly lower position. The Sinaiticus, therefore, in its original state, provides the only direct manuscript evidence for the omission of verse 25; for, as Scrivener

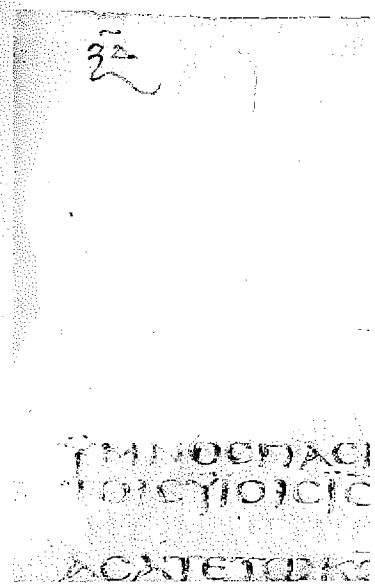
Originally omitted

Added over the original colophon erased

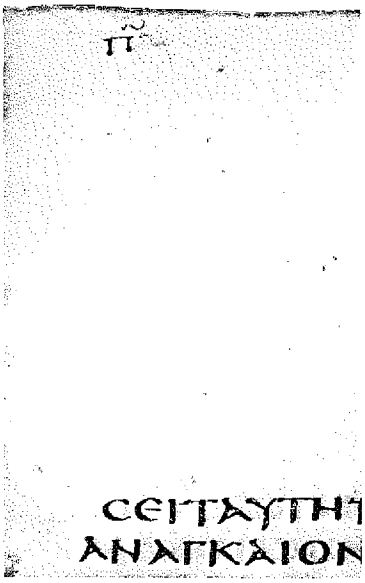
[1] Cf. the recent discussion by L. Vaganay, *Revue biblique* 45, 1936, pp. 512–28.

[2] Prolegomena, pp. 8, xxxvii–xxxviii. Matthew lacks subscription, but not coronis.

[3] Scribe A in this particular page refilled his pen about every 1½ lines so the effect of a new dip of ink is nothing novel.



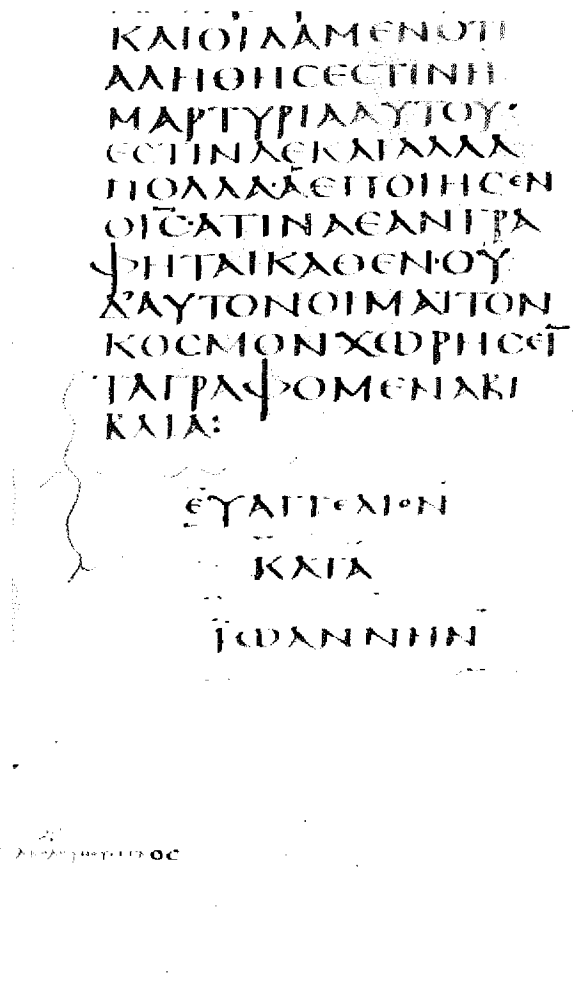
Quire 64 (earlier) *O.T. 174*



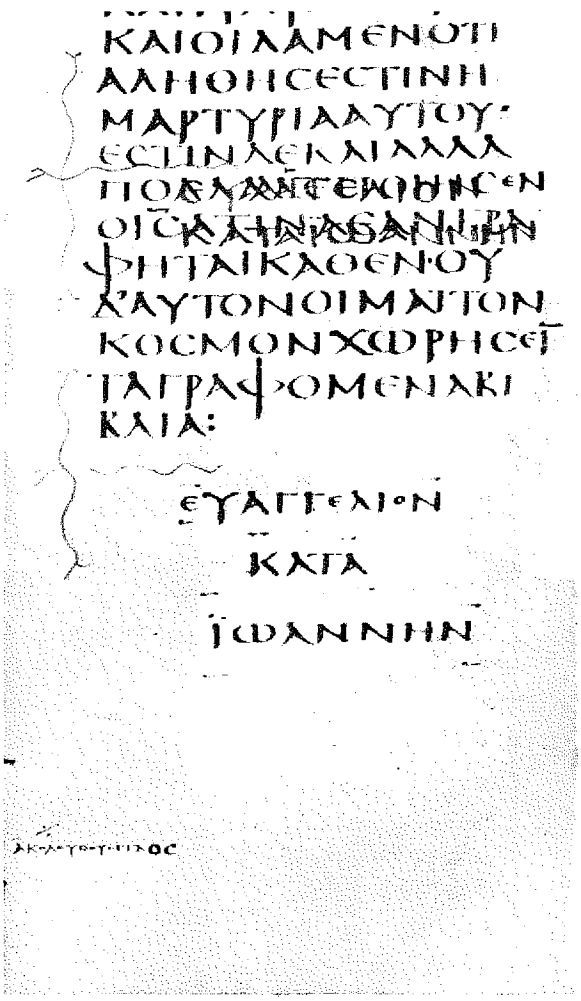
Quire 84 (earlier) *N.T. 78*

Quire 83 (later) *N.T. 78*

SPECIMENS OF EARLIER AND LATER QUIRE-NUMERATIONS



Photograph by ordinary light *N.T. 61*



The same with original colophon restored *N.T. 61*

ENDING OF ST. JOHN'S GOSPEL

pointed out (*Collation*, p. lix, note 7), the Dublin MS. Trin. Coll. A. 1. 8 originally included verse 25 alone on the last (and now missing) page, as still does Egerton MS. 2610 (Gregory 700).

It may be noted here that Tischendorf (Prolegomena, p. 7) errs in calling the last quire of John a ternion; actually it is a regular quaternion, but the last two leaves, left blank by the scribe, have been cut out by some vellum-hunter, the stubs being glued down to the verso of the last remaining leaf of the quire. The same fate has befallen two blank leaves which originally came after the end of Malachi, and a single blank leaf after the end of Luke.

4. THE SUPPOSED LACUNA AFTER THE EPISTLE OF BARNABAS

No leaves lost at end of Barnabas

SOME pointless speculation has resulted from the reluctance of scholars to accept Tischendorf's plain statement (Prolegomena, p. 7)[1] that quire 91 (92 in the earlier numeration), which contains the latter part of the Epistle of Barnabas, consisted of a single bifolium only. Scrivener (*Collation*, p. xxxv)[2] suggested that the six leaves which he imagined to be missing at the end of the quire contained the apocryphal Acts of Paul, or Revelation of Peter, both of which follow Hermas in the well-known catalogue in the Codex Claromontanus. Rendel Harris (cf. Swete, *Introduction*, p. 282, note 2), even proposed the Odes of Solomon. In binding the manuscript, however, it was possible to ascertain once for all that the quire consisted of one bifolium, the two pages being ruled together and actually conjoint. Nothing, therefore, as Lake (N.T. p. xvi) has already demonstrated, is, or ever has been, missing from the manuscript at this point.

5. THE SHEPHERD OF HERMAS

The text of the fragmentary leaf of Hermas

THE last surviving leaf of Hermas consists of two fragments, restored below; the smaller of these, which never reached the British Museum, contained on each side parts of 21 lines from the innermost column of the leaf (recto col. i, verso col. iv). The larger fragment comprises the right half of the leaf, containing on each side two outer columns complete (recto cols. iii–iv, verso cols. i–ii) and the edges of a third (recto col. ii, verso col. iii).

[1] The quire number is misprinted as $\overline{\text{HA}}$ instead of $\overline{\text{ϡA}}$.

[2] Where, however, he wrongly refers to it as quire 90.

Recto, Col. i

Mand. II. 7. [φυλασσε ουν την]
[εντολην ταυτην ως]
[σοι λελαληκα ινα]
[η μετανοια σου και]
[του οικου σου εν]
[απλοτητι ευρεθη]
[και ακακος και αμι]
αντος
7 ἐντολ[η γ
παλιν μ[οι λεγει α]
ληθιαν α[γαπα και]
πασα νι α[ληθια εκ]
του στομ[ατος σου]
εκπορευ[εσθω ι]
να το πν̄[α ο ο θ̄ς κα]
τωκησε[ν εν τη]
σαρκι ταυ[τη αληθες]
ευρεθη π[αρα πασιν]
ανθρωπ[οις και ου]
τως δοξ[ασθησε]
ται ο κ̄ς ε[ν σοι κατοι]
κων οτ[ι ο κ̄ς αλη]
θινος εν [παντι ρη]
ματι κα[ι ουδεν πα]
ρ αυτω ψ[ευδος οι]
ουν ψευ[δομενοι]
αθετουσ[ι τον κ̄ν]
[κα]ι γειν[ονται α]
[ποστερηται του κ̄υ]
[και μη παραδιδον]
[τες αυτω την παρα]
[καταθηκην την ελα]
[βον ελαβον γαρ]
[παρ αυτου πν̄α α]
[ψευστον τουτο εαν]
[ψευδες αποδωσω]
[σιν εμιαναν την]
[εντολην του κ̄υ]
[και εγινοντο α]
[ποστερηται ταυτα]
[ουν ακουσας εγω ε]
[κλαυσα λιαν ιδων δε]
[με κλαιοντα λεγει]
[τι κλαιεις οτι φη]
[μι κ̄ε ουκ οιδα ει δυ]
[ναμαι σωθηναι]
[δια τι φησιν ουδε]
[πω γαρ φημι κ̄ε εν]

Recto, Col. ii

[τη εμη ζωη αληθες]
[ελαλησα ρημα αλλα]
[παντοτε πανουργω]ς
[εζησα μετα παντω]ν
[και το ψευδος αληθε]ς
[επεδειξα παρα π]α
[σιν ανοις και ο]υ
[δεποτε μοι ουδε]ις
[αντιπεν αλλ επιστ]ευ
[θη τω λογω μο]υ
[πως ουν φημι κ̄ε δυ]
[ναμαι ζησαι ταυτ]α
[πραξας συ μεν φησι]
[καλως και αληθως]
[φρονεις εδει γαρ σε]
[ως θ̄υ δουλον εν αλη]
[θια πορευεσθαι και]
[πονηραν συνειδη]
[σιν μετα του πν̄ς τη]ς
[αληθιας μη κατοι]
[κειν μηδε λυπην ε]
[παγειν τω πν̄ι τω]
[σεμνω και αληθι]
[ουδεποτε φημι κ̄ε]
[τοιαυτα ρηματα]
[ακριβως ηκουσα]
[νυν ουν φησιν α]
[κουεις φυλασσε]
[αυτα ινα και τα]
[προτερα α ελαλη]
[σας ψευδη εν ταις]
[πραγματειαις]
[σου τουτων ευρε]
[θεντων αληθινων]
[κακεινα πιστα γε]
[νηται δυναται]
[γαρ φημι κακεινα]
[πιστα γενεσθαι]
[εαν ταυτα φυλαξη]ς
[και απο του νυν]
[πασαν αληθιαν]
[λαλησης δυνη]
[ση σεαυτω ζωην]
[περιποιησασθαι]
[και ος αν ακουσ]η
[την εντολην τα]υ
[την και απε]χη
[ται του πονη]ρο

Recto cols. iii–iv and Verso cols. i–ii complete

Verso, Col. iii

Mand. IV. ii. 3. ἐ[γω αμαρτωλος]
ι̣[να γνω ποια ζη]
ο̣[μοαι εργαζομενος]
ἐ[ργα οτι πολλαι ει]
ο̣[ιν αι αμαρτιαι και]
π̣[οικιλαι ζησῃ φη]
ο̣[ιν εαν τας εντο]
λ[ας μου φυλαξῃς]
κ̣[αι εν αυταις]
π̣[ορευθῃς και ος αν]
ἀ[κουσας τας εντο]
λ[ας ταυτας φυ]
λ[αξῃ ζησεται τω θ̄ω̄]
ἐ[γω φημι κ̄ε̄ προσ]
θ̣[ησω του επερω]
τ[ησαι λεγε φη]
ο̣[ιν ηκουσα φημι κ̄ε̄]
π̣[αρα τινων δι-]
δ[ασκαλων οτι ε]
τ[ερα μετανοια ου]
κ[εστιν ει μη ε]
κ[εινη οτε εις υδωρ]
[κατεβημεν και]
ἀ[ελαβομεν αφε]
[σιν αμαρτιων η]
[μων των πρoτερων]
[λεγει μοι καλως]
[ηκουσας ουτω]
[γαρ εχει εδει γαρ]
[τινα ειληφοτα]
ἀ[αφεσιν αμαρ]
τ̣[ιων μηκετι αμαρ]
τ[ανειν αλλ εν]
[αγνεια κατοικειν]
ε[πει δε παντα εξα]
κ̣[ριβαζῃ και τουτο]
ο̣[οι δηλωσω μη]
δ[ιδους αφορμην]
τ[οις μελλουσι πι]
σ̣[τευιν η τοις νυν]
π[ιστευσασιν ‘η τοις’]
‘ν[υν πιστευσασιν’]
ε[ις τον κ̄ν̄ οι γαρ]
ν̣[υν πιστευσαν]
τ[ες η μελλοντες]
π[ιστευειν μετα]
ν̣[οιαν αμαρτιων]
ὀ[υκ εχουσιν α]

Verso, Col. iv

[φεσιν δε εχουσι]
[των προτερων α]
[μαρτιων αυτων]
[τοις ουν κληθει]
[σι προ τουτων των]
[ημερων εθηκεν]
[ο κ̄ς̄ μετανοιαν]
[καρδιογ]νωστης
[γαρ ων] ο κ̄ς̄ και π̄ᾱ
[τα προγι]νωσκω̄
[προιδεν] την ασθε
[νειαν τ]ω̣ν α̅ν̅ω̅ν̅
[και την] πολυπλο
[κιαν του] διαβολου
[οτι ποιη]σι τι κακ̄ο̄
[τοις δου]λοις του
[θ̄ῡ και π]ονηρευσε
[ται εις αυ]τους πο
[λυσπλαγ]χνος ουν
[ων ο κ̄ς̄] εσπλαγχνι
[σθη επι] την προι
[ησιν αυ]του και ε
[θηκεν τ]ην μετα
[νοιαν τ]αυτην και
[εμοι η ε]ξουσια της
[μεταν]οιας ταυτης
[εδοθη] αλλα εγω
[σοι λεγ]ω φημ[ι]

. . . . . .

NOTES ON THE PRECEDING TEXT

Recto col. i, 7–8. Pap. Michigan 130 reads κα[ι καθαρα κ]αι ακακ[ος] κ̣α̣ι̣ α̣[μιαντο]ς, Athous apparently καὶ ἄκακ[ος καὶ] καθαρὰ καὶ ἀμίαντος (cf. Campbell Bonner, *A Papyrus Codex of the Shepherd of Hermas*, 1934, p. 132). ℵ must have omitted either καθαρά or ἄκακος, since to include both would raise the number of letters per line to an improbable average, e.g. 15, 16, 16, 15, 16, 15. Of the two, ἄκακος, a favourite word of Hermas, has a better claim to inclusion than καθαρά, which was perhaps imported from James i. 27 (θρησκεία καθαρὰ καὶ ἀμίαντος). In any case there is no room for e.g. ἡ καρδία or ἡ καρδία μου to justify either the Old Latin, which reads *et cor mundum habe*, or the Palatine version, which has *et cor tuum sit mundum et indeficiens apud deum*. As there is similarly no trace of anything like ἡ καρδία in the Michigan papyrus, the Athous, or the Ethiopic version, it is virtually certain that it formed no part of the original text of Hermas; and there is much to be said for Bonner's suggestion (op. cit., p. 134) that it arose through a corruption or misreading of ἄκακος in the Greek text from which the Latin versions derive. 12 νι expunged and erased, apparently by the scribe himself. 15–16 κατωκησεν. So also Athous (κατῴκησεν). l. κατῴκισεν. 21 ο κς. C^a and Athous ὁ κύριος ὁ. 22 ὅτι κύριος Athous, but ὁ is here demanded by the space. 45 οὐ δύναμαι Athous, an obvious blunder for εἰ δύναμαι; the versions have *an*.

Recto col. ii, 4 εξησα. So both Latin versions (*vixi*) and Ethiopic. There is scarcely room for ἐλάλησα (= Athous), which probably arose by assimilation to the immediately preceding ἐλάλησα. 5 το ψευδος. So Old Latin (*mendacium*). Athous τὸ ψεῦδός μου, with the Palatine version (*mendacium meum*), but this would necessitate a line of 20 letters, an altogether impossible length. 47–8 ἀφέξεται [*sic*] Athous.

Verso col. iii, 1–5 Athous ἁμαρτωλός εἰμι, ἵνα γνῶ ποῖα ἔργα ἐργαζόμενος ζήσομαι, ὅτι πολλαί μου εἰσὶν αἱ ἁμαρτίαι, supported by the versions. 9–10 Athous πορευθῇς ἐν αὐταῖς. 41–3 The scribe erroneously repeated η τοις νυν πιστευσασιν, but corrected his mistake by inserting deletion hooks, one of which is still visible at the beginning of l. 42.

Verso col. iv, 11 Athous ἔγνω τὴν ἀσθενείαν, cf. Old Latin *et scit infirmitatem hominum*, and Palatine version, *qui infirmitatem hominum noverat*. But ἔγνω is much too short for the lacuna, as Tischendorf himself observed. He therefore proposed προέγνω, but this is very objectionable just after προγινώσκων. Clement of Alexandria, who gives a free rendering of the passage in Strom. ii. 13, has προεῖδεν at this point, and this, if spelled προιδεν, exactly fits the space. The Ethiopic has simply *cum sciret . . .*, omitting τὴν ἀσθενείαν altogether. 17 πορηρευσεται ℵ*, πονηρευσεται C^a (and perhaps already ℵ¹). 20 ων. So Clem. Alex., l.c. Athous omits. The versions are not close enough to help. 28 φημ̣[ι. The μ, though mutilated, is certain. l. φησι. Athous has ἀλλὰ λέγω σοι, φησί, the Old Latin *et ideo dico tibi*, the Palatine version *sed dico tibi, inquit*. But [σοι λεγ]ω does not fill the lacuna, which perhaps therefore contained [υμιν λεγ]ω, with the Ethiopic (*sed ego quoque dico vobis*). 18–19 πολυσπλαγχνος. Athous πολυεύσπλαγχνος, but there is no space here for the extra syllable. On the form cf. F. X. Funk, *Opera Patrum Apostolicorum*, 1878, pp. 340–1, note on Vis. i. iii. 2.

The text of the Codex Athous as printed by Lake[1] has been used in this conjectural restoration, a text from which the Sinaiticus varies in small details but apparently not in substance. It is hardly necessary to point out that where no vestiges of the text survive, our restorations are purely *exempli gratia*, the number of

[1] *Facsimiles of the Athos Fragments of the Shepherd of Hermas*, Oxford, 1907.

letters in a line showing considerable variation. Dots are placed beneath letters which are either doubtfully read or severely mutilated. The breathings and accent in verso col. iii are by a very late hand but are helpful when the letter itself has disappeared; in verso col. iv it has not seemed necessary to reproduce them. Except in a few cases we have not attempted to reconstruct B's erratic spelling.

6. THE LOST ENDING OF THE MANUSCRIPT

It has been shown above that about 265–70 leaves are lost from the beginning of the manuscript, and 56 leaves from the Minor Prophets. How much is lost at the end of the manuscript cannot be even guessed at, as we are unable to tell whether other non-canonical works succeeded Hermas. But a minimum figure can be given by estimating the number of leaves which the missing part of Hermas would have occupied. The fragmentary leaf, as reconstructed in the preceding section, must have ended with Mandates IV. iii. Up to this point the seven complete leaves cover 1,036 lines of Lake's text, so that for the remainder of Hermas, occupying 2,944 lines, twenty more leaves must be postulated.

Original number of pages

Adding these missing leaves to the 390 now extant for the whole manuscript, we find that in its original state it must have exceeded 730. With this figure may be compared the Vaticanus, which, according to the old Greek foliation, contained 774 leaves up to Hebrews ix. 14, the point at which it breaks off, and the Alexandrinus, which contained 814 leaves up to 2 Clement xii. 5, where it too breaks off. In the latter case we know from the table of contents that the Clementine Epistles were followed by the Psalms of Solomon.

III. THE SCRIBES: HISTORICAL RETROSPECT

TISCHENDORF's work as a palaeographer can be regarded from two points of view. Firstly, as a decipherer he has no superior, and scholars may rest assured that the text he has provided is in all essentials sound. Secondly, as a judge of script he compels our admiration, and in this respect, too, apart from the error of inventing scribe C, he has well and truly laid the foundations of all future investigation of the Codex. The detection of this error has, however, placed the study of the hands upon a firmer basis and opened the way to novel and important conclusions, especially on the relation between scribe and colophon.

Tischendorf's four scribes of the Sinaiticus

The account of the hands given by Tischendorf, Prolegomena, pp. 8–8*, is repeated almost verbatim in two later publications, *Novum Testamentum Sinaiticum*, 1863, p. xxi, and *Novum Testamentum Graece ex Sinaitico Codice*, 1865, p. xxx. In no case does he give any details of the characteristics of the various hands he professed to identify, and we must assume that, in the main, he was guided solely by the general appearance of the script. He distinguished four scribes, among whom he apportioned the writing of the book as follows:

Scribe A: 1 Chron. ix. 27—xi. 22 (O.T. 3), 1 Maccabees, the last $4\frac{1}{2}$ folios of 4 Maccabees,[1] the whole of the New Testament (including the Epistle of Barnabas, but excluding Hermas and the parts written by scribe D detailed below).

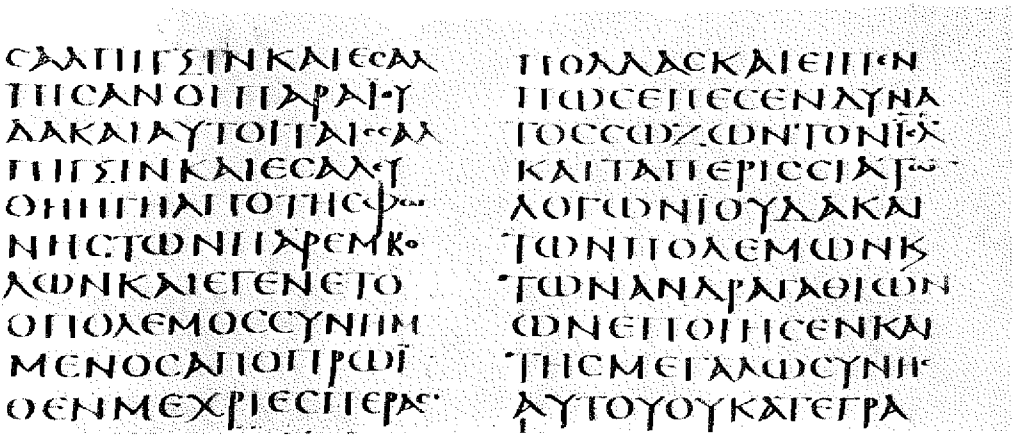
Scribe B: Prophets, Hermas.

Scribe C: Poetical books of O.T. (Psalms, Proverbs, Ecclesiastes, Song of Songs, Wisdom, Sirach, Job).

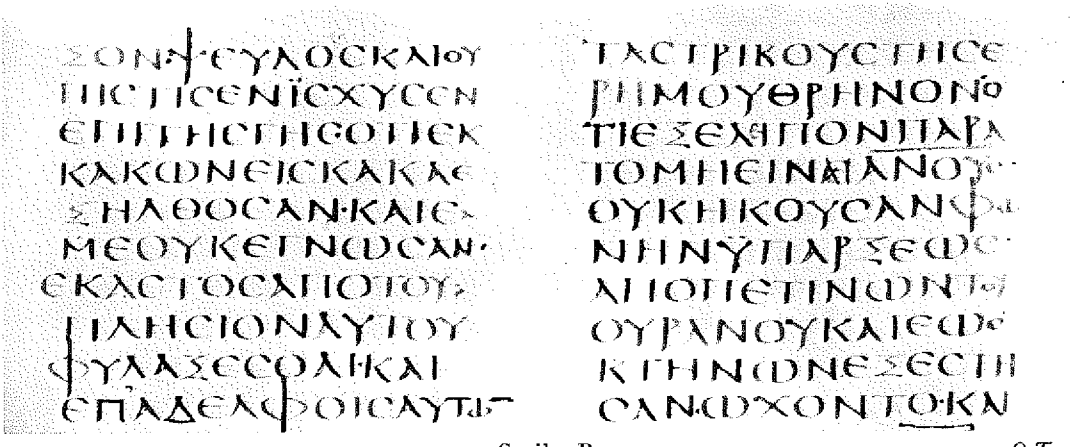
Scribe D: Tobit, Judith, first $3\frac{1}{2}$ folios of 4 Maccabees, the cancel-leaves in the N.T. (10+15, 28+29, 88+91), the last 8 lines of St. John's Gospel (with subscription), and the first $34\frac{1}{2}$ lines of Revelation.[2]

[1] Not assigned in the 1862 edition; assigned to A in *Nov. Test. Sinait.*, p. xxi and *Nov. Test. ex Cod. Sin.*, p. xxx.

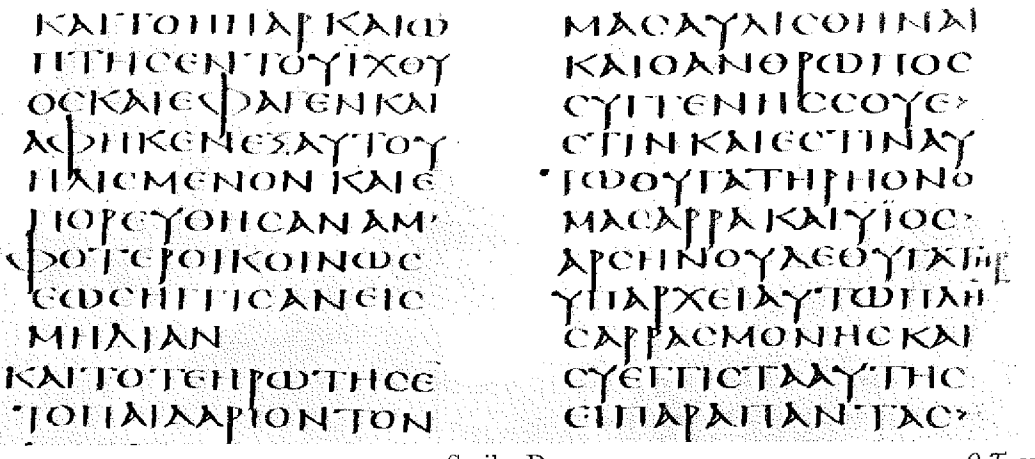
[2] Doubtfully ('Nescio an . . .') assigned in 1862 edition, and in *Nov. Test. Sinait.*, p. xxi; without reservation in *Nov. Test. ex Sin. Cod.*, p. xxx. Scrivener, *Collation*, p. xvi, wrongly gives the number of lines as 32.



Scribe A *O.T. 47*

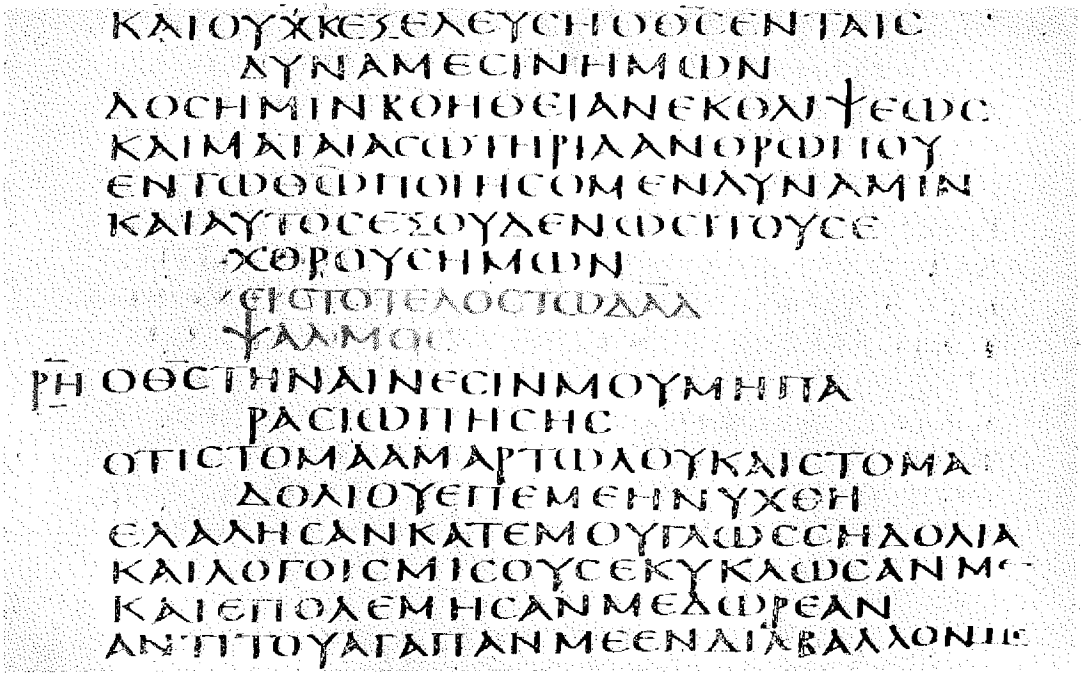


Scribe B *O.T. 95*

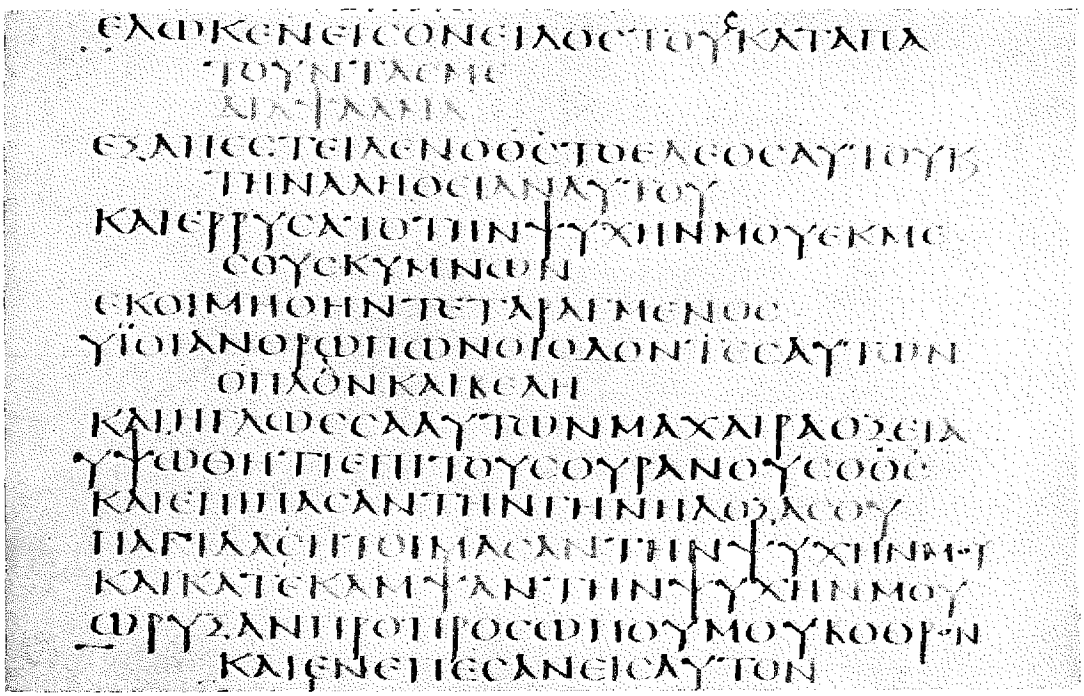


Scribe D *O.T. 25*

SPECIMENS OF WRITING OF THE THREE SCRIBES (PROSE BOOKS)



Scribe A *O.T. 164b*



Scribe D *O.T. 153b*

SPECIMENS OF WRITING OF SCRIBES A AND D (POETICAL BOOKS)

Tischendorf seems never to have expressed any definite opinion on the writers of that part of the manuscript which he found on his first visit to Sinai in 1844, and published two years later under the name of the Codex Friderico-Augustanus, comprising (see Table on pp. 94–5) 1 Chron. xi. 22—xix. 17; 2 Esdras ix. 9—end; Esther; Tobit i. 1—ii. 2; Jeremiah x. 25—end; Lamentations i. 1—ii. 20. By stating in his edition of the Sinaiticus, however, that the isolated leaf of 1 Chronicles, which immediately precedes those at Leipzig, was written by scribe A, he implied that the Leipzig leaves of 1 Chronicles, and consequently of 2 Esdras also, were from his hand; similarly, in assigning the whole of the Prophets to scribe B, he tacitly included the Leipzig leaves of Jeremiah and Lamentations. On Esther he nowhere makes any express pronouncement, though he would probably have assigned it to A, seeing that it follows 2 Esdras on the next column of the same page. The small fragments of Genesis and Numbers are not referred to in the 1862 edition of the Sinaiticus, but Tischendorf subsequently attributed the Genesis to A and the Numbers to B (*Appendix Codicum Celeberrimorum*, 1867, pp. vii–viii). *Silence on the Friderico-Augustanus*

Tischendorf's conclusions have been generally accepted by contemporaries and successors alike, few of whom, indeed, have been in a position to question them. Some critics, it is true, have desired, in view of the extraordinary similarity of the hands, to reduce their number. Tregelles, who in 1862 spent three days examining the Codex at Leipzig, confessed that he could see no difference between Tischendorf's four scribes;[1] and Scrivener, following Tischendorf's statement of the similarity of A and B on the one hand, and C and D on the other, suggested[2] that this similarity amounted to identity, and that the number of scribes should accordingly be reduced to two. *Tregelles* *Scrivener*

It is perhaps hardly necessary to refer to the fantastic suggestion of Traube (*Nomina Sacra*, 1907, pp. 68–71) that there were really six scribes. This number he obtained by differentiating the A who wrote the New Testament from the A who wrote parts of the Old, and the B who wrote Isaiah from the B who wrote the remainder of the Prophets and the Shepherd of Hermas. No concrete arguments were vouchsafed for this opinion, which seems to rest upon slight inconsistencies in the use of *nomina sacra*, and *Traube*

[1] Scrivener, *Collation*, p. xvi.

[2] Ibid., p. xviii.

Traube himself admits (op. cit., p. 54) that such variation might be due to a change of exemplar, if not simply to considerations of space. He was, however, the first definitely to assign 2 Esdras and Esther, which he rightly gave to A.

Kirsopp Lake

The most recent account of the hands, and the only one in English, is that prefixed by Professor Kirsopp Lake to his facsimile edition of the New Testament (1912), and restated in his edition of the Old Testament (1921). In the main he claims (O.T., p. xxii) to follow Tischendorf, but his practice is not altogether consistent. His statement that B wrote the latter part of 4 Maccabees (O.T., pp. xix, xxii) is inexplicable, since Tischendorf unreservedly (and correctly) identifies the writer as A. No opinion is expressed regarding 2 Esdras and Esther; and a further lack of precision exists with reference to the leaves written by D in the New Testament, which he variously estimates as 'at least six', seven, and eight. On the other hand, he rightly rejects (N.T., p. xx) Tischendorf's contention that the last 8 lines of John were the work of D. Finally, after discussing in detail the small fragments of the Pentateuch, he assigns them with some hesitation to D, remarking that 'it is unfortunate that he [Tischendorf] never expressed any opinion as to the scribe'; but in point of fact Tischendorf, as already recorded, had assigned (wrongly, it so happens) the Genesis fragments to A and the Numbers to B.

Lake has the merit of being the first of all these critics to discuss the individual characteristics of the different hands, to the distinction of which he applies two important criteria. In the first place, he notes that, in the leaves written by A, the superline denoting final -ν at the end of a line partly covers the preceding

A test for scribe B

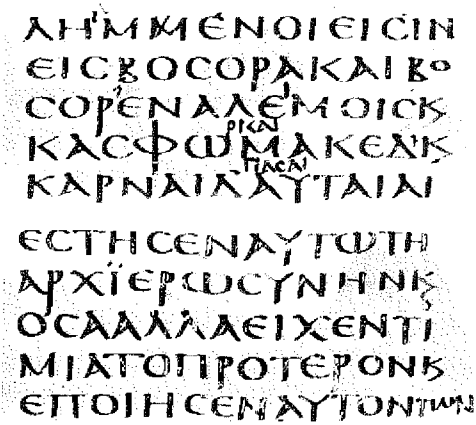
vowel, whereas B always places it more to the right, clear of the writing and projecting far into the margin (cf. Fig. 7). In this Lake is undoubtedly correct, and his conclusion, based originally on the New Testament, is upheld by the evidence of the Old Testament.[1]

A test for scribe D

The second point which Lake emphasizes is the frequent use by scribe D of the sign > in order to fill out a line to its normal length. This criterion was actually adumbrated by Tischendorf himself,

[1] He also adds that the superlines of B are more heavily drawn; but this does not appear to be so, and in any case the evidence is obscured by the fact that throughout the Codex nearly all B's superlines have been overwritten by one or other of the correctors. One of the few which escaped retouching is illustrated in Fig. 7.

Scribe A *O.T. 3*



Scribe A *O.T. 43, 46b*

Scribe B *O.T. 68b*

Scribe B *O.T. 89b*

Scribe D *O.T. 32b*

SUPERLINE FOR FINAL -ν

Scribe D *O.T. 31*

COMPENDIUM FOR καί

for he notes (Prolegomena, p. 7*) its very frequent occurrence in the books of Tobit and Judith, both written by D, and uses its presence in the opening lines of Revelation as an argument (p. 8*) for attributing them to that scribe. The complete validity of this distinction was, however, first demonstrated by Scrivener, who sets out the evidence in the following words (*Collation*, p. xvii, note 4): 'This mark > is never met with in the N.T. at the end of a line for the mere purpose of filling up a blank space (which is its usual office in the O.T. portion of Cod. Sinaiticus and in some other manuscripts), except in the leaves assigned to D, *on every one of which it repeatedly occurs*, viz. 219[1] times in the other six leaves, four times in Apoc. i. 1–5. Elsewhere > is found in only four[2] places which have suffered correction (Matth. vi. 28; xxii. 9; Luke xi. 36; xii. 58), being used, like — in 1 Cor. xv. 22, merely to cover erasures.' He also notes that while absent from the parts of the New Testament written by A it occurs 'several times' in Hermas,[3] which is the work of scribe B.

[1] Actually 222 times, including cases of two or more > at the end of the same line.

[2] Actually five. Scrivener has failed to notice its occurrence in Luke vii. 3 after δοῦλον, over an erasure unrecorded by Tischendorf. Moreover, in all these passages the corrector appears to be none other than scribe D himself.

[3] To be exact, four times, viz. N.T. 143b, 146, 147b, 148b (all but the first over erasures).

IV. THE SCRIBES: A REINVESTIGATION

Of the above-named scholars only Tischendorf and Lake were qualified to give a first-hand opinion, and Lake, preoccupied with the photographic reproduction of the manuscript, has confessedly been content to follow the pioneer. A re-examination of Tischendorf's conclusions therefore seemed due, and has justified itself by the results detailed below.

1. THE LINE-ENDINGS

In discriminating between the hands (Figs. 4–5), so alike in general appearance, we have found the forms of the individual letters to be the least reliable test. Certainly each scribe has his habitual way of shaping letters, but each scribe is also capable on occasion of deviating therefrom. What does not alter is the general effect of his style. This effect can best be analysed at the ends of lines and under three aspects: (1) The use of compressed letters in order to reach a suitable point for ending the line (Fig. 6);[1] (2) the use of the filling mark > to equalize the lines; (3) the shape of the compendium for καί (Fig. 7).

Scribe A Scribe A: (1) Compression begins far back in the line, sometimes at the sixth or seventh letter from the end, or, in the Poetical books, as far back as the eleventh (O.T. 235, 239, 240^{b}).[2] Upright strokes are excessively elongated, rounded letters excessively diminished (cf. Fig. 6). (2) The filling mark is never used.[3] (3) The abbreviation of καί takes the form of an oblique stroke at an acute angle ⸗.[4]

Scribe B Scribe B: (1) Compression, when necessary, rarely affects more than three letters, and those evenly. (2) The filling mark appears on an average once every three pages in the Prophetic books, and in Hermas even more rarely (cf. p. 21 above). In exception to this rule the sign occurs twelve times in one page of Jeremiah (O.T.

[1] For the rules governing the division of words at the end of a line cf. Kenyon, *Palaeography of Greek Papyri*, 1899, p. 32.

[2] The exaggeration of this practice is natural in the Poetical books which are written in *cola* and where consequently an overrun of a few letters entails a great waste of vellum.

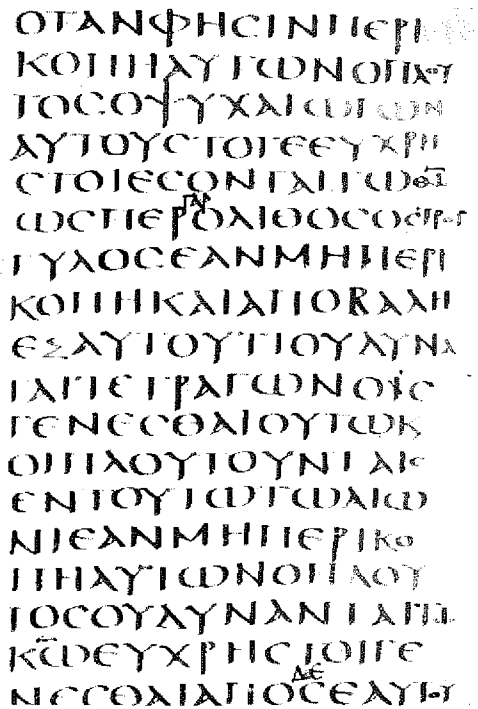
[3] Cf. p. 21 above.

[4] A unique example with the stroke curved in the manner of scribe D is to be seen in N.T. 38^{b}, col. i (Fig. 7).

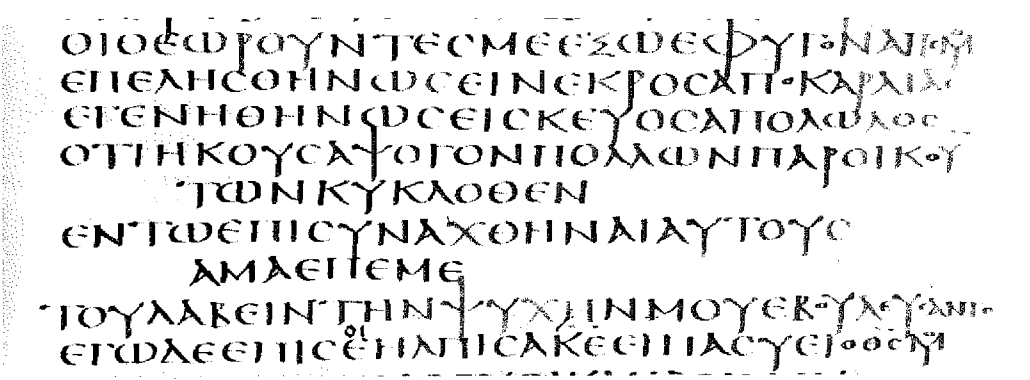
Scribe A (poetical books) *O.T. 235*

Scribe A (prose books) *N.T. 52b*

Scribe D (prose books) *N.T. 91*



Scribe B *N.T. 145*



Scribe D (poetical books) *O.T. 141*

DIMINUTION OF LETTERS TOWARDS END OF LINE

95). (3) The abbreviation of καί resembles that of A, with a tendency to blunt the angle a little.

Two further peculiarities of B may here be noted: (4) The position of the superline denoting final -ν at the end of the line, which, as Lake first demonstrated (cf. p. 20), stands much farther to the right than in the other two hands. (5) The extremely illiterate spelling, due not to the exemplar (for it has invaded Hermas as well) but to phonetic rendering.[1]

Scribe D

Scribe D: (1) In his treatment of final letters D resembles A, but without the extreme elongation of the vertical strokes. Seldom more than three letters are diminished, except in his portion of the Psalms, where he surpasses even A in the extent of diminution. (2) D is immediately recognizable by his lavish use of the filling mark, sometimes doubled (>>), twice (over erasures, N.T. 38^b, 39^b) even tripled. On the six cancel leaves of the New Testament as many as 222 can be counted. (3) Equally unmistakable is the form of the καί compendium, where a curving stroke takes the place of the acute angle common to A and B.

Superiority of D

In general we may say of D that he stands out as the most individual of all the scribes, and his hand, if somewhat affected, shows a greater sense of style than either of the others. Not only are the letters as a whole smaller and more delicate, but their relative proportions are different. In A and B the rounded letters (ΕΘΟϹϢ) are of practically the same height and width as the square letters (ΖΗΝΠ), so that the writing appears to be enclosed between two straight parallel lines. In D, on the other hand, the rounded letters are noticeably smaller, and this gives a slightly undulating effect.

Disappearance of 'scribe C'

It will be seen that the above examination takes no account of scribe C, and here we come to the one serious oversight on the part of Tischendorf. For some reason which it is difficult to explain Tischendorf failed to perceive a change of hand in Psalm xcvii. 3 = O.T. 160^b, and assigned all the Poetical books to one scribe. In the confusion resulting from this inadvertence he also failed to perceive that Psalms i. 1—xcvii. 3 were written by D and Psalms xcvii. 3—Job by A. It is true that he noted a similarity between 'C' and D (see p. 19 above), which he no doubt based upon the script of Psalms i. 1—xcvii. 3, but their actual identity for that portion of

[1] See pp. 54–7 below.

the manuscript escaped him. Yet, with the elimination of 'C', the truth at once becomes obvious. The rounded shape of the καί compendium and the occurrence of the filling mark (17 times), quite apart from the general appearance of the script, instantly stamp the writer of O.T. 134–60 as D, while the angular compendium of καί and the absence of the filling mark, along with the general traits of the hand, no less clearly indicate the writer of O.T. 160^b–245^b as A. In addition, the colophons—strongest and most objective argument of all, as will be shown below—are identical with those of A.

2. THE FORM OF OMEGA

The omega with central prong (ω)

The form of one letter in the alphabet, namely omega, raises questions of peculiar importance. Not the ordinary form, but the distorted form at the end of a line when compression becomes necessary. In these circumstances the outer limbs are greatly reduced and the central stroke elongated (ω). This form is used by all three scribes, but with varying degrees of frequency. In the

Use by A

Old Testament A hardly ever employs it, the only instances we have noted being O.T. 11, 14^b, 161. In the New Testament, however, he writes it freely in Matthew, after which it suddenly diminishes in intensity (Fig. 8), though found sporadically through-

Use by B

out the whole N.T., the latest example being N.T. 140. B, alone of the scribes, is consistent in his use of ω. He never departs from it when a diminished letter is required, with the result that it occurs

Use by D

in great abundance throughout the Prophets and Hermas. D, on the other hand, resembles A in his erratic use of the form. It is found eight times in the fragment of Genesis (O.T. 1), amply proved to be his by the abundance of filling marks (14 times) and the unmistakable καί compendium. It is frequent also in his portion of the Psalms, and in his minute hand as diorthotes. Elsewhere, not a trace of it.

Ornamental use of ω

So much for the employment of this form in line-endings. But besides this practical use, it is clear that ω was regarded as particularly ornamental, for it is used freely by all three hands in the superscriptions, subscriptions, and running titles of books. B, it is true, does not employ it in the colophons to Joel and Jonah, but the full-size ω is found in the section-headings of Isaiah and Jeremiah (e.g. O.T. 75, 100^b) written by him.

Considerable importance has been attached to the occurrence of this form of omega in the Sinaiticus, since it has been thought to bear on the origin of the manuscript. 'The long omega', says Lake (O.T., pp. xiii–xiv), 'is found in Pap. Rylands 28, a papyrus of probably the fourth century, but Dr. Hunt was not able to quote any other instance of its use in papyri, nor is it common in vellum manuscripts. I only know of it in the Codex Vaticanus, and here,

Connexion of ω with Egypt

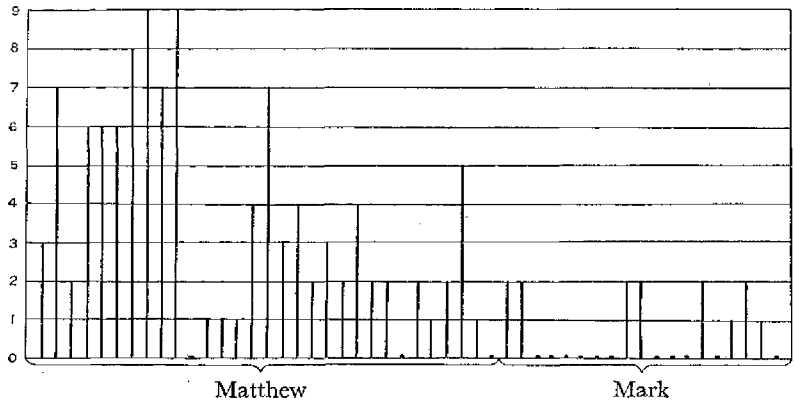


FIG. 8. OCCURRENCES OF ω IN SUCCESSIVE PAGES OF MATTHEW AND MARK WRITTEN BY SCRIBE A (cf. p. 24).

too, it is comparatively rare.' While concluding that this form, with the so-called 'Coptic' mu and the cursive xi, points to Egypt as the provenance of the Sinaiticus, Lake makes the reservation that these apparently Egyptian traits 'may equally well be due to the existence of a single type of professional literary script throughout the Graeco-Roman world in the fourth century'. This latter view is probably nearer the truth, for though, as we shall see, ω is characteristic of a certain group of Coptic manuscripts, it also occurs in manuscripts which cannot well be connected with Egypt.

ω in Greek MSS.

A list of the manuscripts in which we have found this form of omega may now be given:

1. Codex Sinaiticus: all three hands.
2. Codex Vaticanus:[1] both hands, e.g. pp. 80 (?), 180 (over-written), 484 (subscription), 713 (subscription), 976 (subscription), 1023, 1028, 1321, 1351 (running title), 1374, 1379, 1382 (subscription).

[1] The pagination of the facsimile is here referred to.

3. Codex Alexandrinus:[1] second hand only (apart from two exceptions to be mentioned hereafter), viz. O.T. ff. 161 *quater*, 161^{b} *ter*, 162 *quinquies*, 163 *septies*, 163^{b}, 164, 164^{b} *ter*, and thereafter only sporadically, e.g. 165^{b}, 168^{b}, 169, 173^{b}, 176^{b}, 184^{b}, 186, 208, 211, 223, 238, 239^{b}, 240^{b}, 246 *bis*, 248^{b} *bis*, 249^{b}, 418^{b}, 420, 420^{b}, 426 *bis*, 432. The two exceptions are N.T., ff. 45 (in a *titulus*), 107 (ΥΜΙΝ converted to ΥΜΩΝ).

4. Pap. Rylands 28 (Prognostications, 4th cent.; papyrus codex). The long omega here practically ousts the ordinary form, in whatever part of the line: the two pages in the published facsimile show ten out of a total of thirteen omegas as certainly of the long type.

5. Codex Colberto-Sarravianus (Octateuch, late 4th–early 5th cent.): second hand only, viz. pp. 173, 174, 175, 179, 186, 198, 257, 259, 263 *bis*, 269 *ter*, 283, 287 *quater*, 289, 291, 293 *quinquies*, 294 *ter*, 295, 296 *quinquies*, 299 *bis*, 300, 301 *ter*, 302, 303, 304 *ter*, 305, 306. Also in the superscriptions on pp. 37 and 64 (the former not recorded by Tischendorf, the latter assigned by him to corrector D).

6. Codex Ambrosianus (Octateuch, 4th–5th cent.): here we have only Ceriani's description to rely upon; he notes that the long omega occurs 'interdum' at the ends of lines (*Monumenta sacra et profana*, iii, p. xi).

7. Codex Beratinus (Gospels, 6th cent.): one example (at the end of a line) occurs in the facsimile given by Scrivener, *Introduction to the Criticism of the New Testament*, 1894, i, pl. xv (opposite p. 166).

8. Wadi Sarga MS. no. 17 (Coptic homily, 5th(?) cent.; leaf of vellum codex). One example can be seen on the *verso* (W. E. Crum and H. I. Bell, *Wadi Sarga*, 1922, pl. i).

ⲱ *in Coptic MSS.*

9. The *Pistis Sophia* (Brit. Mus. Add. MS. 5114; Coptic gnostic work, 4th (?) cent., vellum codex): first hand only; used freely both in ⲱ and ϖ.

10. Brit. Mus. Or. MS. 5000 (Sahidic Psalter; papyrus codex, 6th–7th cent.):[2] one example occurs in the facsimile in E. A. W. Budge, *The earliest known Coptic Psalter*, 1898, pl. ii (opposite p. 78).

11. Lastly, the long omega is especially frequent in manuscripts from Shenoute's famous White Monastery at Atripe near Sohag in Upper Egypt, now dispersed among many European libraries. These manuscripts (all vellum codices) cannot as a rule be exactly dated, but seem to have been written about the 7th–9th centuries. Some references may be given here to published facsimiles of manuscripts of this group in which the long omega is represented:

H. Hyvernat, *Album de Paléographie copte*, Paris, 1888, pls. ii. 2 (Clarendon Press 57), iii (Borgia 246), iv. 1 (Borgia 245), iv. 2 (Zouche 108A), ix. 1 (Borgia 141).

E. Amélineau, *Œuvres de Schenoudi*, Paris, 1914, vol. i, pls. i (Naples

[1] Patrick Young's foliation (in ink, in the centre of the leaf) is here used.

[2] This was found together with Brit. Mus. Or. MS. 5001 (published by E. A. W. Budge, *Coptic Homilies in the Dialect of Upper Egypt*, 1910), which, as it contains the Imperial protocol on a fly-leaf at the beginning (reproduced op. cit., plate i), cannot, at latest, be more than a few decades after the Arab conquest.

186), xvii (Naples 198), xviii (Naples 199), xix (Naples 211*); vol. ii pls. vii (Naples 209*), ix (Naples 210*), xii (Paris Bibl. Nat. 130.1).

P. J. Balestri, *Sacrorum Bibliorum Fragmenta Copto-Sahidica*, vol. iii, plates, no. 5 (Borgia 42).

Use of ⳩ no certain clue to provenance

This list makes no pretence of being exhaustive, especially as regards the Coptic manuscripts, but it is sufficient to show the complexity of the problem. Unfortunately the new evidence here advanced does little to clarify the situation. The numerous Coptic manuscripts, which like P. Ryl. 28 must have been written in Egypt, give colour to the current theory that the form is characteristically Egyptian; but this is by no means borne out by the Greek manuscripts, most of which are earlier than the Coptic. The Ambrosianus was brought from Macedonia in the sixteenth century; the Beratinus has been at Berat since 1356, and before that was probably in Patmos; there is no evidence whatsoever for connecting the Sarravianus with Egypt, and the arguments for the Egyptian origin of the Sinaiticus, Vaticanus, and Alexandrinus are far from conclusive.[1]

3. THE COLOPHONS

Normal place for titles

We now come to a further and completely decisive criterion for the scribes, hitherto not sufficiently appreciated, namely the colophon, composed of tail-piece (coronis) and subscription. But first a few remarks upon the nature of these subscriptions in general. In papyrus rolls the regular place for the title of a book is at the end, and at the end only; headings and running titles are unknown. This tradition still exerted a strong influence at the time when our manuscript was written. The main title stands at the end of each book; the others are subsidiary, often added later, if at all, and in an inconspicuous hand. That those main titles are written by the same scribe as the immediately preceding text has never been doubted, and is so obvious from the most cursory inspection of the manuscript that it needs no justification here. More important still, the coronis, sometimes termed arabesque by editors, was also executed by the scribe. The coronis, in fact, amounts to his signature, so distinctive is the design (or designs) adopted by each and so restricted the range of individual variation. In the Vaticanus the repertory of patterns is greater, in the Alexandrinus greater

Importance of coronis

[1] Cf. pp. 66–9 below.

still, but for all that the principle is equally clear, and even when the designs of the different scribes show an approximation some mannerism will infallibly betray the executant.

Types of coronis

A glance at the illustrations (Pls. 1–9) will prove more effective than detailed description. Here only the main features need be mentioned. Both in the Vaticanus and in the Sinaiticus the design is based upon two lines of ornamentation crossing at right angles and enclosing the left-hand angle of the final column of the

Scribe A

text. A's coronis is the simplest, consisting of a crossed pair of wavy lines, sometimes ornamented with tendrils. B and D prefer rectili-

Scribe B

near types. B's designs fall into three different classes; the first, best represented by those at the end of Isaiah and Jeremiah, consists of a column of lozenges enclosing small circles and bordered with dots; the horizontal limb is similar, but on a smaller scale. Joel and Zephaniah show the same type, but with the horizontal reduced to a pair of interlacing wavy lines. Nahum, Habakkuk, and Haggai are even more perfunctory. The second class, exemplified by Obadiah and Jonah, consists of a column of herring-bone ornament crossed by a pair of interlacing wavy lines. Zechariah introduces the third type, a pair of closely rippled lines crossing at right angles, bordered by small circles; Malachi is identical, and

Scribe D

so, on a smaller scale, is the colophon to Vision 2 of Hermas. D rings the changes on one pattern (Tischendorf wrongly prints an A design at the end of Tobit and Judith),[1] of which the constituents are a vertical line of dots with a v-shaped finial at top and bottom, crossed by a running spiral or a row of herring-bone (really a row of the filling marks for which he displays such partiality in the text). This type of colophon shows a remarkable resemblance to the favourite design of hand A in the Vaticanus, and these two scribes have a further link in their use of the running spiral.

The coronis an infallible criterion

It is obvious, from what has been said above, that the importance of the colophon cannot be over-rated. Scholars have not always been able to agree about the scripts of the present manuscript, but had they realized the full implication of the colophons, they would have been spared much fruitless surmise; a mere change of ink and of superficial appearance, for example, would not have misled Tischendorf into supposing that D wrote the last eight lines and subscription of St. John's Gospel (cf. p. 12 above). We have

[1] The mistake is admitted by Tischendorf in his commentary (vol. i, p. I*, col. i).

only to look at the pattern of the colophon to recognize beyond a peradventure the signature of A. Neither would Traube have invented a separate A and a separate B for the New Testament, had he interpreted the colophons aright. Above all, it was the colophons which provided the culminating argument against the existence of a separate hand C. No less striking has been the effect of this criterion in the diagnosis of the Vaticanus and the Alexandrinus; in the former it enables us to extend the range of the first hand to another section of the manuscript, in the latter it greatly reduces the probable number of scribes. Details will be found in the special appendices on these two volumes (pp. 87–93 below).

4. FINAL ASSIGNMENT

It results from the above considerations that the text should be apportioned as follows:

Scribe A: Numbers (frag.), 1 Chronicles, 2 Esdras, Esther, 1 Maccabees, 4 Maccabees viii. 7—end, Psalms xcvii. 3—end, Proverbs, Ecclesiastes, Song of Songs, Wisdom, Sirach, Job. Also the New Testament (except the portions written by D) and the Epistle of Barnabas.

Scribe B: The Prophetic books, viz.: Isaiah, Jeremiah, Lamentations, Joel, Obadiah, Jonah, Nahum, Habakkuk, Zephaniah, Haggai, Zechariah, Malachi. Also Hermas at the end of the New Testament.

Scribe D: Genesis (frag.), Tobit, Judith, 4 Maccabees i. 1—viii. 7, Psalms, i. 1—xcvii. 3, Matthew xvi. 9—xviii. 12, xxiv. 36—xxvi. 6, Mark xiv. 54—end, Luke i. 1–56, 1 Thessalonians ii. 14—end, Hebrews iv. 16—viii. 1, Revelation i. 1–5 (up to and including the word νεκρῶν).

V. THE SUPPLEMENTARY APPARATUS

NEXT after the script of the actual text the subsidiary apparatus (cf. N.T., p. xx) calls for examination. By this we understand (1) the titles, comprising the headings of the separate books (hereafter designated superscriptions), the running titles on the succeeding pages, and the titles placed at the end of the book (subscriptions); (2) the rubrics in the Psalms; (3) the Eusebian notation in the Gospels; (4) the paragraphi in the Gospels and Acts; (5) the Euthalian sections and titles in Acts; (6) the reckoning of στίχοι at the end of some of the Epistles.

1. TITLES (cf. Fig. 9)

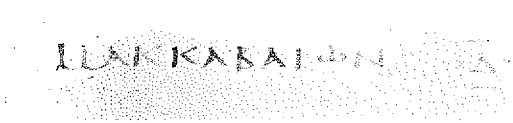
THE superscriptions, running titles, and subscriptions must be considered simultaneously, and we would emphasize at the outset how difficult it is to identify the writer of a few letters penned under quite different conditions from the ordinary text. After repeated examination we have arrived at definite conclusions, but nothing like the same certainty is claimed for them as for the identification of the scribes who wrote the text. A further difficulty is occasioned by the haphazard practices of the scribes, none of whom observed any rational consistency in the addition of the supplementary apparatus.[1]

We begin by tabulating Tischendorf's own conclusions (Prolegomena, pp. 8*–9),[2] as far as these can be elicited from his somewhat crabbed Latin:

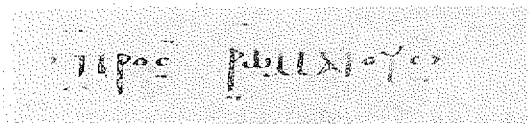
BOOK	SUPERSCRIPTION	RUNNING TITLES	SUBSCRIPTION
Tobit, Judith .	D	D	D
1 Maccabees .	D	(none)	A
4 Maccabees .	D	D (once)	A
Prophets . .	B	D	B
Poetical books .	C	D	C
Gospels . .	D	D	D (except Luke)
Romans, 1 and 2 Corinthians	D	D	A

[1] Tischendorf attributes this inconsistency to the haste with which, as he supposes, the book was written (Prolegomena, p. 9).

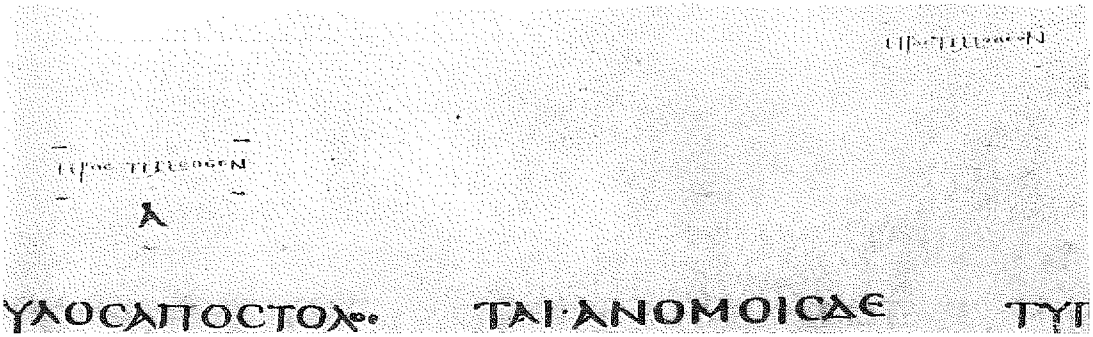
[2] Lake's account (N.T., p. xx), which in the main follows Tischendorf, suffers to some extent from over-simplification.



Scribe D 4 Maccabees *O.T. 56*

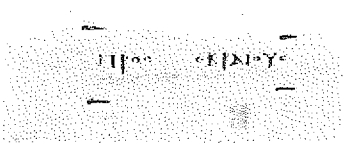


Scribe D Romans *N.T. 62*

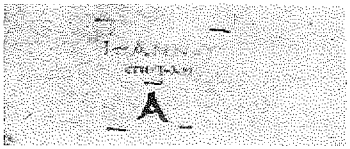


Scribe A 1 Timothy *N.T. 95*

Scribe A 1 Thess. *N.T. 87b*

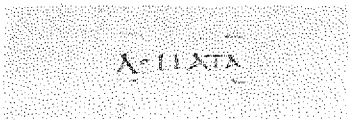


Scribe A Hebrews *N.T. 89b*

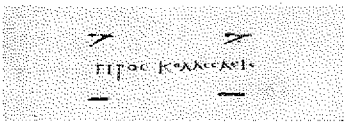


Scribe A 1 John *N.T. 123*

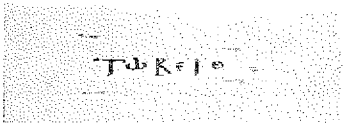
Scribe A Proverbs *O.T. 178*



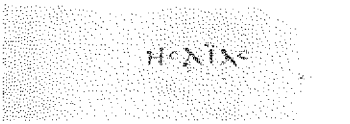
Scribe A Song of Songs *O.T. 196*



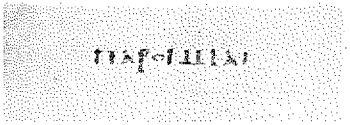
Scribe A Colossians *N.T. 87*



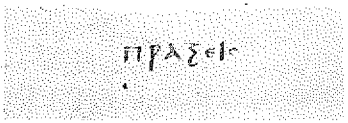
Scribe D Tobit *O.T. 28*



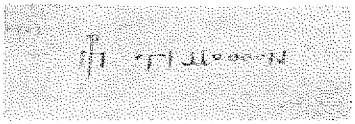
Scribe B Isaiah *O.T. 80*



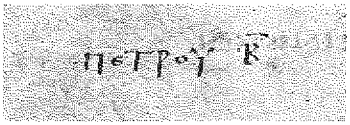
Scribe B Proverbs *O.T. 176*



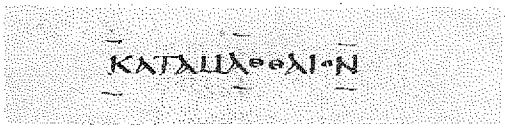
Scribe B Acts *N.T. 110*



Scribe B 2 Timothy *N.T. 96*



Scribe B 2 Peter *N.T. 124*



Scribe A Matthew *N.T. 2*

Scribe A John *N.T. 51b, 52*

BOOK	SUPERSCRIPTION	RUNNING TITLES	SUBSCRIPTION
Galatians to Philemon	Mostly by writer of the στίχοι; rest by D	Occasionally by writer of the στίχοι; rest by D	A (except 1 Thessalonians)
Acts, Catholic Epistles, Revelation	D or a similar hand	D or a similar hand	A
Epistle of Barnabas	A	D or a similar hand	A
Hermas . .	(none)	B	(lost)

General characteristics of subscriptions

Let us examine these conclusions. The subscriptions of the separate books (Pls. 1–9) present no problem. As pointed out, the end of a book was, at the period when this manuscript was written, still felt to be the proper place for its title to appear. Apart from Matthew, where it is omitted altogether, the subscription is in each case written by the scribe of the immediately preceding text. Thus D, who pens the last page of Mark, naturally adds the subscription to that gospel. Similarly with 1 Thessalonians, which concludes a cancel-leaf written by D. A marked feature in these subscriptions (and, indeed, in nearly all the subsidiary apparatus) is the use of letters of reduced size in the body of the word. Clearly, such forms were regarded as ornamental, and, like the omega with high central limb and the cursive xi, figure prominently in such places. This style is common to both A and D, but B makes no use of it except in certain of the running titles. His subscriptions to the Prophetic books are all in full-sized uncials.

Distinction between superscriptions and running titles

A distinction must be drawn between the superscriptions proper and the running titles ('inscriptiones' and 'tituli' respectively in Tischendorf), especially when, as is sometimes the case, the latter appear on the first page of a new book. Lake, in his discussion (N.T., p. xx), runs the two together. The regular position for the superscription is immediately above the first column of text, whereas the running title is naturally placed more or less in the centre of the upper margin of the page. It must be confessed that in some instances, notably 4 Maccabees, Isaiah, Matthew, Romans, Acts, and Hermas the running title by itself on the first page may have been regarded as taking the place of a superscription. But that the distinction was felt is proved by the case of 1 Timothy,

which shows not only a superscription over the first column but also a running-title in the centre of the same page.

When and by whom inserted

The superscriptions and running titles were inserted sometimes at the time of writing, sometimes later, either by the scribe who wrote the text or by a colleague. Our reasons for the conclusions given in the table below (pp. 33–4) may be summarized briefly.

In the first place, two well-marked types of hand stand out:

Two hands immediately recognizable

1. A very small hand, using a pale yellowish-brown ink, the titles being ornamented with short strokes drawn above and below, as προς εβραιους. This hand can be seen in the superscriptions to Galatians, Ephesians, Philippians, Colossians, 1 and 2 Thessalonians, Hebrews, 1 and 2 Timothy, Titus, Philemon, 1 Peter, 2 Peter, 1, 2, and 3 John, Jude, and the running titles to Proverbs (second and third instances only), Song of Songs, Colossians, Hebrews, 1 Timothy (first only), 1 Peter.

2. A somewhat larger hand, with more shading of the letters, but without the ornamental strokes. This is found in the running titles of Tobit (second and third only), all the Prophetic books, Proverbs (except second and third), Ecclesiastes, Wisdom, Sirach, Job, 1 Timothy (second only), Acts, 2 Peter (misplaced), Jude, Revelations, Barnabas, Hermas. Psalms, it may be noted, has neither superscription nor running titles.

The first certainly scribe A

The former of these hands may be identified with scribe A, since it uses a form of alpha (A)[1] found in subscriptions written by A.[2] This is confirmed by the running titles of Hebrews, the sequence of which is broken by the cancel-leaf written by D.[3]

The second, B

The second hand may be identified with B, since it is found throughout the parts of the manuscript written by B, whose work, so far as we know, was never revised or corrected in any way by his colleagues. A further argument can be found in the second

[1] Found in the superscriptions to Galatians, Colossians, 1 Thessalonians, 1 John, 3 John, and the running titles to Colossians. On a much larger scale it occurs in the subscription to Haggai in the Codex Alexandrinus.

[2] Viz. Romans, 1 Corinthians (in the numeral), 1, 2, and 3 John. It also occurs in the numeral in the superscription of 1 John, obviously written at the same time as the text. In the text itself there are occasional examples of this form.

[3] Another argument for identifying this hand as A's is that certain of these ornamental strokes have a slanting tail, 7, as do the subscriptions to 1 and 4 Maccabees, Sirach, and Job—all admittedly written by A. A complete parallel is furnished by the Vaticanus, where the second hand uses the tailed dash consistently, the first never.

running title of 1 Timothy, where προς is written in a compendium (π̄ς) found repeatedly in the text written by B,[1] but nowhere else.

The rest of the running titles are to be divided between A and D, mainly on stylistic grounds, though one important criterion of a different character remains to be noticed; this is the spelling of the name John (Tischendorf, *Appendix codicum celeberrimorum*, 1867, p. xi). D invariably uses the spelling ιωανης, whereas A and B[2] share the more usual ιωαννης.[3] This enables us to assign the running titles of the Gospels to A, for D is excluded by the spelling κατα ιωαννην, B by the use of ornamental strokes.

A and D responsible for the remainder

We now assign the superscriptions and running titles as follows:

Roman type = probably written at the same time as the text.
Italic type = probably added later.
† = in the centre of the upper margin.

BOOK	SCRIBE OF TEXT	SUPER-SCRIPTION	RUNNING TITLES	SUB-SCRIPTION
Genesis (fragment)	D	..	B (?)	..
Numbers (fragment)	A	..	..	..
2 Esdras (including the section of 1 Chronicles)	A	..	*A* (4, 6) *B* (8, 10, 12, 14)	A
Esther	A	A	A	A
Tobit	D	D	*B* (24, 26) D (28)	D
Judith	D	D	D	D
1 Maccabees	A	*D*	..	A
4 Maccabees	D A	D†	D (57 only)	A
Isaiah	B	B†	*B*	B
Jeremiah	B	*B*	*B*	B
Lamentations	B	*B*	..	..
Joel, Obadiah, Jonah, Nahum, Habakkuk, Zephaniah	B	*B*	..	B
Haggai	B	*B*	*B* (over Zechariah)	B
Zechariah	B	the corrector C^{b2}	(cf. Haggai)	B
Malachi	B	*B*	..	B
Psalms	D A	..	..	A
Proverbs	A	*A*	*B* (176, 182, 184, 186, 188) *A* 178, 180)	A
Ecclesiastes	A	A	*B*	A
Song of Songs	A	A	*A*	A

[1] O. T. 65^b, 66^b, 73^b, 97, 108^b, 122.

[2] B's spelling of the name is ascertainable only in the running titles of Revelation.

[3] The only semblance of an exception is ιανης in Rev. i. 9, corrected by the writer, A, to ιωανης; but this is clearly a mere bungle, not a genuine variant. The alteration of ιωανης in Rev. i. 1 (written by D) to ιωαννης is due to the corrector C^a.

BOOK	SCRIBE	SUPER-SCRIPTION	RUNNING TITLES	SUB-SCRIPTION
Wisdom, Sirach	A	*A*	*B*	A
Job	A	A	*B*	A
Matthew	A / D	*A*†	*A*	..
Mark	A / D	*D*	*A*	D
Luke	D / A	D	*A*	A
John	A	*A*	*A*	A
Romans	A	*D*†	*D*	A

[From this point onwards the last three columns are each subdivided into two, in order to present the evidence of the numbered epistles, the first division referring to the verbal title, the second to the numeral; e.g. 1 John was originally superscribed $\bar{A}$, the title ιωαννου επιστολη being a later addition.]

BOOK	SCRIBE	SUPER-SCRIPTION		RUNNING TITLES		SUB-SCRIPTION	
		Word	*Num.*	*Word*	*Num.*	*Word*	*Num.*
1 Corinthians	A	*A*	*A*	*D* (69, 72, 73) / *A* (70, 71)	*D* / ..	A	*A*
2 Corinthians	A	*D*	*D*	*D*	*D*	A	A
Galatians, Ephesians	A	*D*	..	D	..	A	..
Philippians, Colossians	A	*A*	..	*A*	..	A	..
1 Thessalonians	A / D	*A*	A	..	..	D	D
2 Thessalonians	A	*A*	A	..	..	A	..
Hebrews	A / D	*A*	..	*A* (omitting 91)	..	A	..
1 Timothy	A	*A*	A	*A* (95), *B* (96)	..	A	A
2 Timothy	A	*A*	A	..	..	A	A
Titus, Philemon	A	*A*	..	..	..	A	..
Acts	A	*B*†	..	*B*	..	A	..
James	A	..	..	..	..	A	..
1 Peter	A	*A*	A	*A*	A	A	A
2 Peter	A	*A*	A	*B* (over 1 John)	*B*	A	A
1 John	A	*A*	A	(cf. 2 Peter)	..	A	A
2 John, 3 John	A	*A*	A	..	..	A	A
Jude	A	A	..	*B*	..	A	..
Revelation	D / A	D	..	*B*	..	A	..
Barnabas	A	A	..	*B*	..	A	..
Hermas	B	*B*†	..	*B*	..	..	..

2. THE RUBRICS IN THE PSALMS (cf. Fig. 10)

THE numbers and titles of the Psalms, with the recurring direction διάψαλμα and the frequent paragraphi denoting the conclusion of a Psalm or section, are written throughout in vermilion, and the

identity of the scribe or scribes who wrote them, though not a question of great importance in itself, supplies valuable evidence for determining the origin of the Eusebian apparatus in the New Testament. Hitherto no positive pronouncement has been made regarding the writing of these rubrics, Tischendorf (Prolegomena, p. 8*)[1] merely noting that they and the Eusebian apparatus appeared to be in different hands.

Rubrics and text by the same hand

It is natural to suppose that the writer of the text inserted the titles—and with them the numeration, διαψάλματα and paragraphi —as he went along; otherwise he could scarcely have calculated so exactly the space required, sometimes four, five, or even six lines in length. If we compare the rubrics of Psalms i–xcvii with the text, it is at once obvious that the writer is indeed the same; they reflect every characteristic of scribe D, and the identification is clinched by the filling mark in the titles of Psalms xxvi and xciii. It follows that to D's characteristics can be added the broad flourished mu (in the numerals μ–μθ), the method of marking a numeral with a short line above and below, and the large bold paragraphi.

A's rubrics overwritten

We may now on analogy expect to find that the remainder of the Psalms were rubricated by scribe A, the writer of the accompanying text; here the primary evidence has been obscured by the fact that nearly all the original rubrics have been overwritten, but it is clear that in their first state they differed notably in style from those of scribe D; the mu, for instance, has a flat base (ⲙ) resembling the shape used in the text; the numerals, although always marked with a line above, as often as not lack the underline invariably found in D's work, while the paragraphi are often so small as to be hardly noticeable. Moreover, the forms of the letters where these have not been affected by overwriting show all the characteristics of scribe A, and that he was responsible for the original rubrics can now be taken as certain. The overwriting, apparently undertaken because the colour had faded badly, is more difficult to attribute, but the frequent addition of the line below the figure where it was previously lacking, points to scribe D, and this is confirmed by the general appearance of the script, so far as it can be judged in such circumstances.

The overwriting probably by D

[1] 'Minio quae in Vetere Testamento scripta sunt ab alia manu derivanda quam quae evangeliis Ammonii sectiones cum canonibus Eusebii addidit, quamvis non sit grave utriusque scripturae discrimen.'

3. THE EUSEBIAN APPARATUS

NEITHER Tischendorf nor Lake reaches any conclusion regarding the scribe who inserted the Eusebian numeration in the Gospels. Tischendorf, as we have seen, merely noted that the hand differs, though not markedly so, from that of the rubrics of the Old Testament. Lake considered the isolated numerals too slender a basis for identifying the writer with any of the text hands, and suggested that he should be called 'scribe E' (N.T., pp. xx–xxi). A more solid foundation is, however, now provided by the parallel case of the rubrics in the Psalms and the conclusions we have drawn therefrom.

Two scribes engaged

The Eusebian apparatus is clearly the work of two scribes; the first numbered only sections 1–52 of Matthew, in a small fine hand using a rather faint pigment. Both section and canon number are capped with horizontal lines. The second scribe overwrote almost all the first hand's work, and entered the remainder of the apparatus, except in Luke where he got no farther than § 106.[1] Apart from Matthew §§ 1–52, where he is merely overwriting, this scribe regularly omits the line over the canon number, and sometimes that over the section number as well.

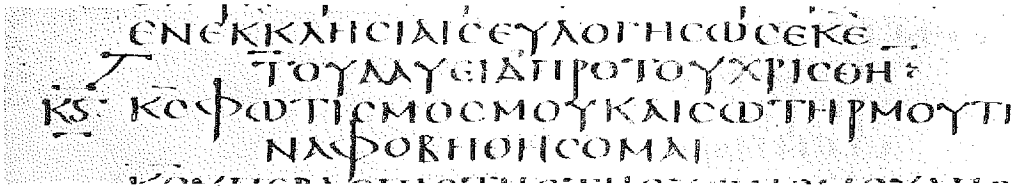
The second certainly D

Comparison with the Psalms at once establishes the identity of the second numerator as none other than scribe D, the most marked similarities being in the shape of kappa and the extravagantly flourished mu. The absence of the Eusebian apparatus from one pair of the cancel-leaves written by D (N.T. 10, 15) might at first sight appear an obstacle to this theory; but this fact is actually of little moment, since the other pair (N.T. 28, 29) is duly numbered, and, in any case, we have already pointed out the casual way in which the numeration was inserted (p. 8–9 above).

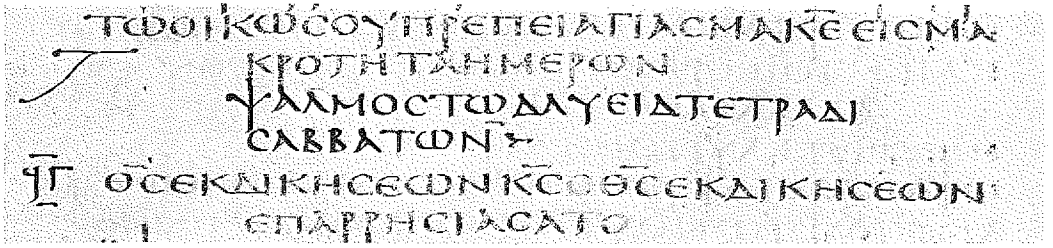
The first probably A

The first hand is not so easy to identify, but its remarkable similarity to that of the Euthalian sections in Acts (p. 38 below) strongly suggests A. Thus we have a complete parallel to the Psalms, where A's numeration is similarly overwritten by D. Furthermore the cessation of the paragraphi in Matthew (p. 37) at exactly the same place as the original Eusebian numeration makes it practically certain that all these additions were part of A's grandiose but quickly abandoned scheme for the embellishment of the manuscript.

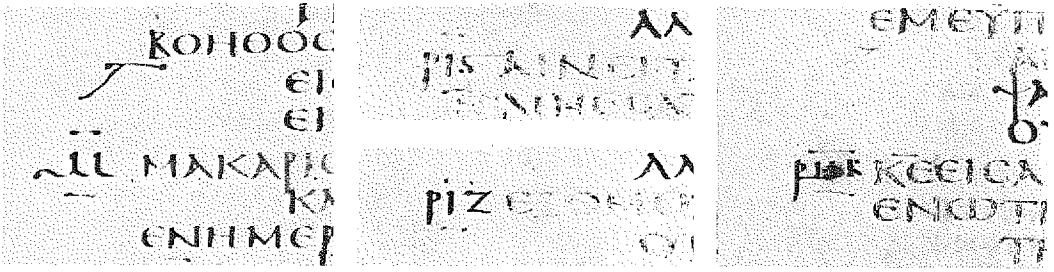
[1] An isolated section number σνς' (256), in ordinary ink, occurs on N.T. 44^b, apparently noted down casually by the writer of the text or an early corrector.



Psalm 26 (scribe D) *O.T. 140*



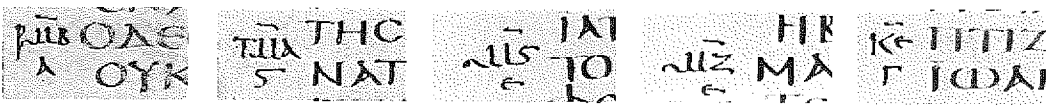
Psalm 93 (scribe D) *O.T. 159b*



Psalm 40 (scribe D) *O.T. 144b* Ps. 116, 117 (scr. A) *O.T. 166* Psalm 142 (scribe A) *O.T. 172*

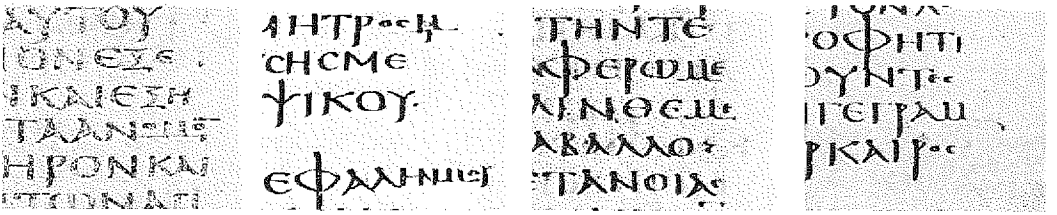
NUMERATION OF PSALMS

Mt. § 1 Mt. § 25 Mt. § 26 Mt. § 41 Mt. § 47



Mt. § 142 Mt. § 341 Lk. § 46 Lk. § 47 Jo. § 25

NUMERATION OF EUSEBIAN APPARATUS



Scribe A *O.T. 53b* Scribe A *O.T. 196* Scribe D *N.T. 91* Scribe D *N.T. 126b*

SHAPE OF FINAL μ

The insertion of the Eusebian apparatus represents almost the last stage in the production of the manuscript. That it is subsequent to the correction of the text by the scribe himself, A, is shown by N.T. 6, where an omission made good by him in the lower margin has been furnished with the Eusebian numbering by D;[1] and that it is also later than the revision by D can be seen from N.T. 49, where the previous marginal insertion of εΔωκεν by D has slightly displaced the numeration of John § 27 (Fig. 11).

4. PARAGRAPHI IN THE GOSPELS AND ACTS

Due to A

LAKE declares himself unable to attribute these to any particular scribe, or even to any definite period, but there can be little doubt

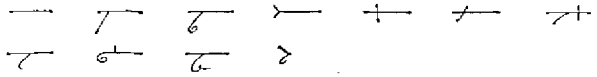


FIG. 11*a*. FORMS OF PARAGRAPHUS.

that they are the work of A, since the paragraphi have repeatedly affected the position of the Eusebian apparatus in Matthew §§ 1–52, which, as we have just seen, was originally the work of A. Either, then, the paragraphi were added first, and the Eusebian numeration later, or both were inserted concurrently. That A abandons the Eusebian numeration at precisely the point where the paragraphi also fail, favours the latter view. It seems indeed that the Eusebian apparatus and the paragraphi are both part of a thorough-going revision of the manuscript by A, for in these same early pages of Matthew accents and breathings have been carefully supplied, quotations from the Old Testament marked with arrow-heads (and, in the earlier cases, the name of the book as well), and a number of corrections in a minute hand designated by Tischendorf B or B^a (see below, p. 45) inserted. The Old Testament quotation-marks cease after the third page (N.T. 2), the accents and breathings in the middle of the fifth (N.T. 3, col. 3, l. 10), but the so-called B–B^a corrections continue for some pages further and gradually merge into A's more usual hand.

The paragraphi both in Matthew and Acts (Fig. 11*a*) show

[1] D is, however, not consistent; a similar addition by A in the lower margin of N.T. 60 does not receive the numeration, which is jotted down in a makeshift way opposite the proper place in the text, with the canon number alongside instead of beneath the section number—a unique arrangement.

remarkable diversity of shape, at least seven varieties being represented in Matthew, and four in Acts. But identity of ink and penmanship, if nothing else, leaves no doubt that one hand is responsible for all. The exact function of these paragraphi is still uncertain (cf. N.T., p. xxi, where the literature on the subject is quoted).

5. SECTION-DIVISIONS AND 'TITULI' IN ACTS

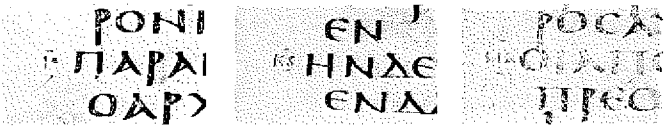
THE numbered sections into which the early part of Acts has been divided, and which are probably derived from a form of chapter and section division attributed to a certain Euthalius (N.T., pp. xiii–xiv), are likewise to be assigned to scribe A. As in Matthew, he left his task uncompleted, for he omits §§ 1 and 3–7, and breaks off after § 42. The paragraphi, which generally but not always coincide with the beginning of a new section, cease with the numeration; and the parallel with Matthew can be carried even farther, for the marking of Old Testament quotations again stops at the same point as the numeration, though the scarcity of quotations in the latter part of Acts deprives this argument of some of its force. The ascription of the section numbers to A is assured, firstly by the frequent occurrence of the horizontal line with sloping tail (7) beneath the numeral (a feature of the superscriptions written by A, see above p. 32); secondly, by the remarkable similarity of the numerals, not only in shape, but in the unpractical smallness of their scale, to the original Eusebian numeration of Matthew §§ 1–52 (the S-shaped digamma in both is specially noteworthy); thirdly by the occurrence, in § μα, of the 'epigraphic' form of alpha, which we have already associated with scribe A.

Likewise due to A

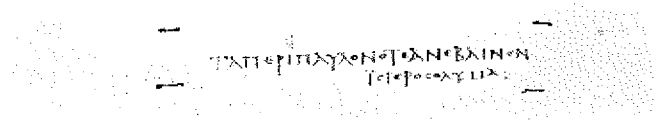
Who also wrote the tituli *in Acts*

Roughly the same arguments serve to identify as scribe A the writer of the 'tituli' (to use Lake's term for the brief synopses written in the upper margin of Acts). The same lines which are found above and below the running titles written by A (see above, p. 32) are used here, the 'epigraphic' alpha occurs frequently, the characteristic form of the καί compendium (ϗ), and the spelling Ιωαννης (N.T. 101). The spelling ϊς for εἰς in N.T. 113^{b} points in the same direction; cf. ϊς in the text of the same page, col. 1, l. 35, also N.T. 1, col. 4, l. 25, and elsewhere.[1]

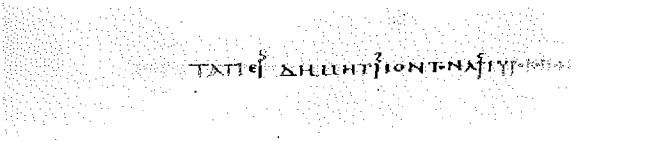
[1] It is worth remarking that scribe D never writes initial ει as ι.



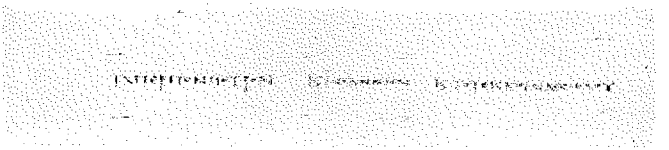
'EUTHALIAN' SECTION-NUMBERS IN ACTS



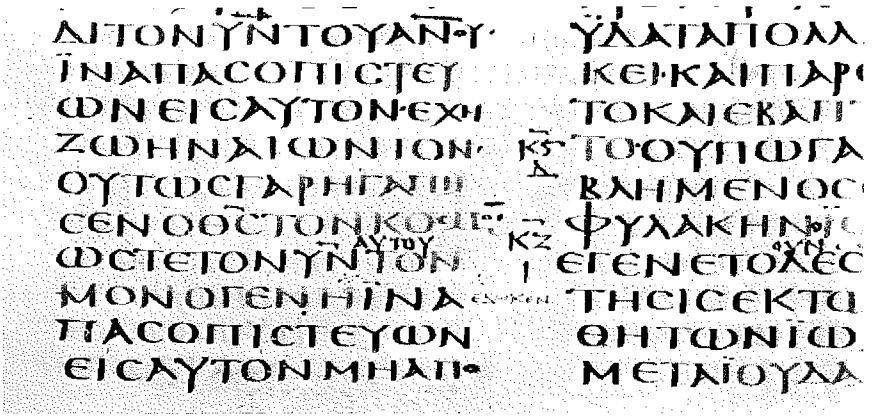
TITULUS TO ACTS XXI. 15 (ϊς for εις, flat-based μ)



TITULUS TO ACTS XIX. 24 (flourished ρ)



TITULUS TO ACTS III. 1 (κ compendium, spelling ϊωαννης)



INSERTION OF EUSEBIAN NUMERATION *N.T.* 49

The section-number $\overline{\text{KZ}}$, which should be flush with εγενετο, has been forced upwards by the prior insertion of ελωκεν, thus revealing the sequence of scribe D's activities.

6. THE WRITER OF THE στίχοι (cf. Pls. 1–10)

AT the end of 2 Corinthians, Galatians, Ephesians, Philippians, Colossians, 2 Thessalonians, Hebrews, 1 Timothy, 2 Timothy, and Titus, the number of στίχοι (i.e. the standard length-measure of Greek prose, usually reckoned at about 36 letters or 12 syllables) has been appended below the subscription in a fine, minute hand. 1 Thessalonians, the end of which falls on one of the cancel-leaves written by D, is passed over, while Philemon has merely the word στιχων (corrected from στιχοι) with the actual number left blank. Tischendorf (Prolegomena, p. 8*) rightly held that the hand was not that of scribe D, pointing to its absence from the cancel-leaf written by D, and alleging a difference of script. He was inclined rather to identify the writer of the στίχοι with the writer of most of the superscriptions and some of the running titles in the Epistles from Galatians onwards, whom we have seen to be none other than scribe A (above, p. 32). Lake notes that the hand 'does not seem to be identical with the corrector A^2 [i.e. scribe D], but to have more affinity with A^4' (N.T., p. xxi). Eventually, however, he decides against this identification, and suggests the non-committal label 'scribe S'.

Identified as A

Our own examination has shown that Tischendorf rightly connected the στίχοι with the small hand which wrote the superscriptions and running titles in the later Epistles; that is to say, with scribe A himself. Apart from general points of style evident in the minute hand itself, we have positive grounds in the constant use of lines above and below, ornamented in one case (N.T. 98) with the characteristic sloping stroke (7), and in the S-shaped digamma (in the numeral ϛ′ = 96, N.T. 98^b). The absence of stichometry from the cancel-leaf written by D fits in well with this view, but as we know so little of the circumstances in which the cancel-leaves were written and inserted, and as in any case the remaining epistles have been left unprovided, we cannot press this argument.

VI. THE CORRECTORS

THE study and identification of the various correctors constitutes the most difficult task in the investigation of the manuscript. Even now, after intensive scrutiny, many of the shorter corrections, consisting of a few letters only, cannot be assigned with anything like certainty, and without the discovery of some entirely new criterion, probably never will be. Fortunately, from a practical point of view, the resulting ambiguities prove of minor importance, since, as we shall endeavour to show, the real difficulty is confined to distinguishing between the various members of the scriptorium itself. These early corrections, whoever actually penned them, can all be recognized with ease and certainty as the product of the scriptorium, and as all are in consequence contemporary with the main script, they stand in this respect on more or less the same footing for the purpose of textual criticism.

Importance of scriptorium corrections

Tischendorf, whose method was followed and elaborated by Lake, produced a complex classification of the different correctors, dividing them firstly into chronological groups, A, B, C, D, and E, and then differentiating the individuals within each. There results, to quote Lake's own nomenclature (N.T., pp. xvii–xviii, xxi–xxiv), the formidable series A^1, A^2, A^3, A^4, A^5, $A^{obliq.}$, $A^{Herm.}$, B, B^a, C^a, C^b, C^c, C^{c*}, D, and E.[1]

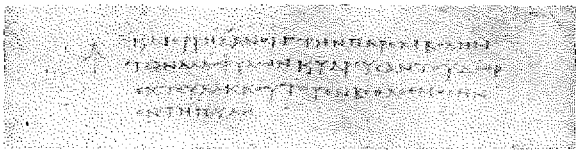
Classifications of Tischendorf and Lake

1. THE A AND B CORRECTORS

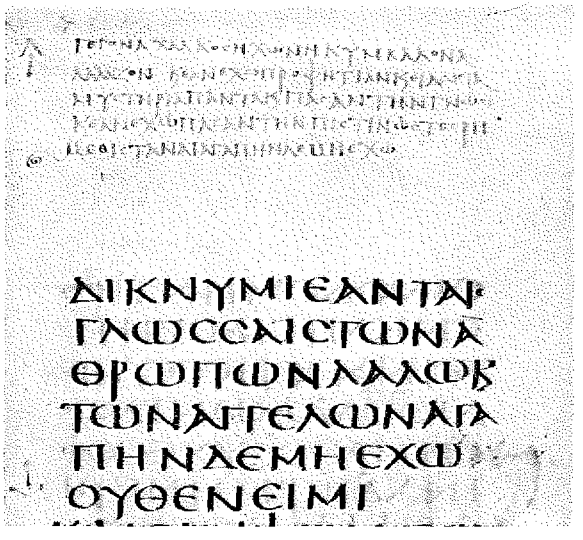
As already pointed out, it is a comparatively simple matter to segregate the earliest correctors, to whom for the moment we shall restrict the discussion. Under this heading we include Tischendorf's groups A and B, since there appears to be no good reason for separating the latter from the work of the scriptorium,[2] the

[1] Tischendorf (cf. Scrivener, *Collation*, pp. xx–xxii) seems to differentiate the 'A correctors' into A, A^a, A^b, A^c, and $A^{obliq.}$, but only in the case of the last does he give any explanation of what he understands by these names. For A^c cf. Prolegomena, p. xxxvi. The classification A^1, A^2, A^3, A^4, A^5, with $A^{Herm.}$, is due to Lake.

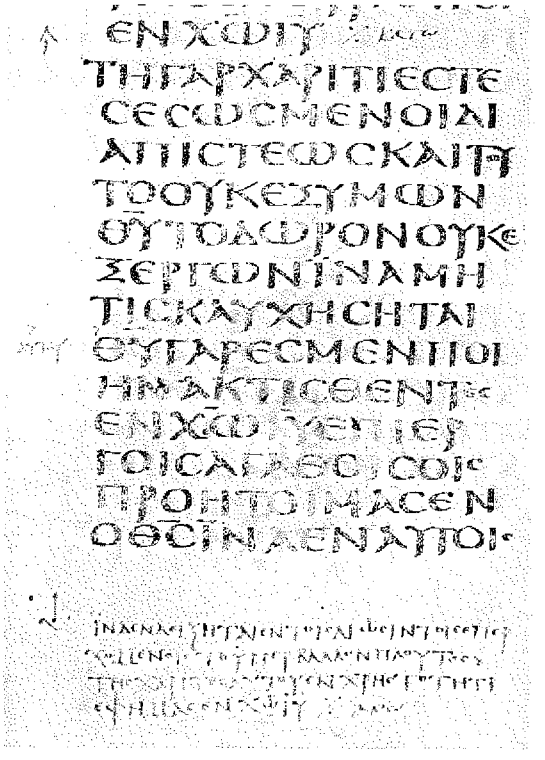
[2] Scrivener's assertion that corrector B is 'a full age below A, and may be conjecturally placed at the end of the sixth century' (*Collation*, p. xxii) is devoid of foundation; the same may be said of Tischendorf's characterization of him as 'vir doctus, qui eo consilio ad retractandum videtur accessisse ut antiquae scripturae variis modis consuleret', reproduced and elaborated by Lake, N.T., p. xxiii.



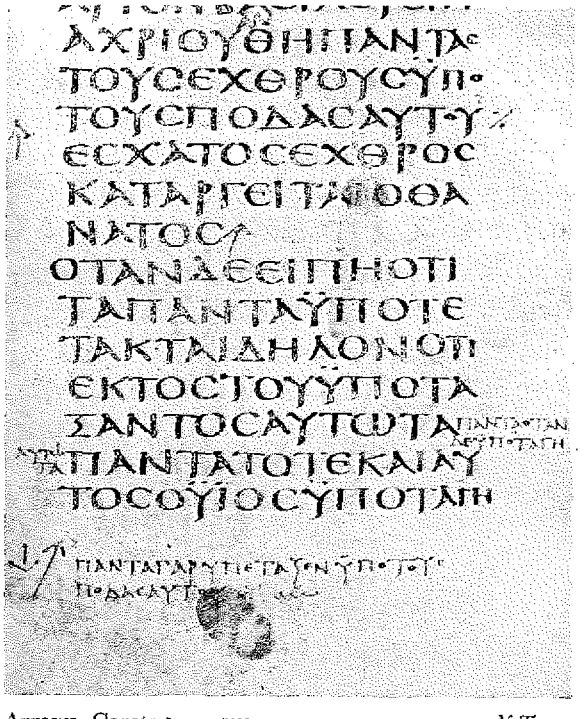
Arrow ϰ compendium Shape of ξ *O.T. 3b*



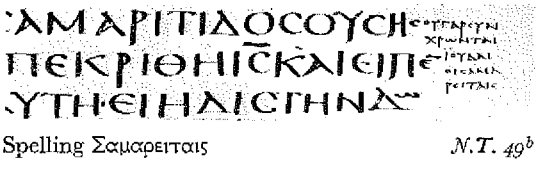
Arrows Carets > ϰ and flourished μ. ανω *N.T. 73*



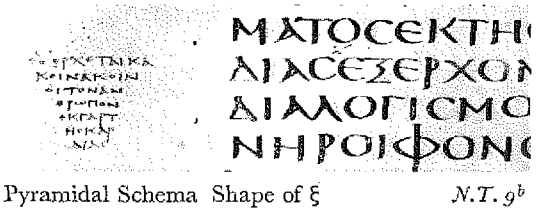
Arrows Filling-mark, carets > ανω, κατω *N.T. 82*



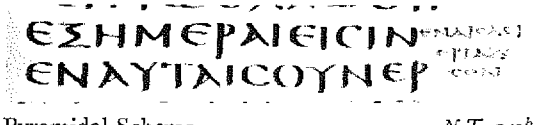
Arrows Carets > ανω *N.T. 74*



Spelling Σαμαρειταις *N.T. 49b*



Pyramidal Schema Shape of ξ *N.T. 9b*



Pyramidal Schema *N.T. 240b*

Shape of ξ *O.T. 196b*

slightly different shade of ink noted by Lake being scarcely perceptible, and in any case useless as a criterion.[1] Such a plethora of original correctors, unexampled in any other manuscript of antiquity, is *a priori* unlikely (the scriptorium was a business establishment, not a committee of revisers), and our efforts have been principally directed to reducing them to a more reasonable number. Since we have already concluded from the evidence of the supplementary apparatus (above, pp. 30–9) that both A and D, in addition to copying the text, were engaged in the further equipment of the manuscript, we may expect to find both among the correctors. Further examination has not only confirmed this surmise, but has enabled us to apportion the entire body of 'A' and 'B' corrections to these two scribes, although to distinguish between them is not always possible. The differences of script on which Tischendorf and Lake relied for their elaborate classification merely prove, in our opinion, that each scribe could, and did, write several different hands.

Only two contemporary correctors

To state the basis of these conclusions is no easy matter, for the various scraps of evidence so interlock that a complete presentation would be full of repetition. All we can do here is to indicate the main lines of approach.

In the definition of ἀγάπη in 1 Cor. xiii (Fig. 12), the words γεγονα χαλκος ηχων . . . αγαπην δε μη εχω have been omitted, by haplography, and supplied in the upper margin in a hand using the type of καί compendium (ϗ) characteristic of scribe D. And D as the writer is further indicated by the shape of kappa and the extravagant mu at the beginning of the last line. The correction is signalized by an arrow-shaped caret, with the head clearly separated from the shaft (↑), while a corresponding arrow (↓) stands opposite the actual place of insertion in the text.[2] This type of arrow-shaped caret is found so frequently in conjunction with

Scribe D one of the 'A correctors'

His critical signs

[1] For a striking case of changing ink without significance see N.T. 74, col. 4, l. 1, where the ink which has been getting progressively lighter up to the letters σετοι suddenly darkens in tone. Cf. also pp. 79–80 below.

[2] This system of opposed arrows is regularly used by the A correctors; the arrows in the upper margin point upwards, in the lower margin downwards, i.e. away from the text in each case, the corresponding arrows in the text pointing the opposite way. This, which is apparently the most ancient system (cf. E. A. Lowe, *Codices Latini Antiquiores*, i, 1934, p. 10), is found in e.g. P. Beatty VI (Numbers and Deuteronomy, early 2nd cent.), though some exceptions occur; it is also used by the oldest correctors of the Vaticanus.

one or other of the distinguishing marks of D, that we can assume it to be his characteristic form; and decisive proof of this is furnished by N.T. 82, where a correction marked in this way contains a filling mark, notable feature of D's hand in the main text.

Other marks of D

The dislocated arrow-caret being established as a characteristic of D, we turn our attention to the corrections so marked in O.T. 3^b, 14; these both include the form of xi (Ξ) affected by Lake's 'A^5', who is thus shown to be D also. Confirmation is given by the spelling Σαμαρειτης in one of these 'A^5' corrections (N.T. 49^b), for in the text scribe A invariably writes Σαμαριτης, while substitution of ει for ι is D's besetting sin in orthography (cf. p. 53 below).[1]

Further conclusions can now be drawn respecting the corrector 'A $^{\text{obliq.}}$', a sloping hand which has been active in the later Pauline epistles. The frequency in these of the rounded και compendium (N.T. 79^b, col. 3; 87, col. 2; 89, col. 3) again points to D; further evidence is the use, in an 'A $^{\text{obliq.}}$' correction (N.T. 85, col. 3) of a caret identical in shape with D's filling mark (>), which is repeatedly attached to corrections in D's more normal hand (e.g. O.T. 6^b, N.T. 65^b, 71^b, 74^b, 82, 83, 85^b). One infers that this sloping hand, which is used almost exclusively in interlinear corrections, is merely an attempt of D's to find a script of legible size suited to the more limited space; its sudden appearance (save for a single word on N.T. 63^b, the first example is on N.T. 77) and the way in which upright and sloping forms alternate in the same correction suggest that this hand was experimental.

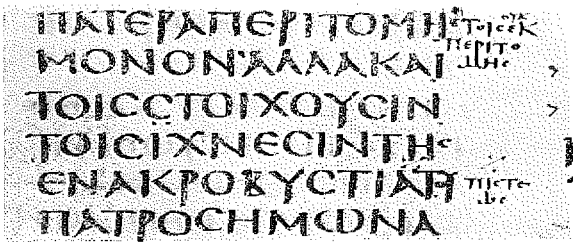
Scribe A the other 'A corrector'

A number of important omissions have been supplied in a hand which uses a different kind of arrow, somewhat perfunctorily drawn, and with a rounded head more or less closely attached to the shaft (ⲗ). These must be the work of scribe A, since they are repeatedly found in company with his angular και compendium (e.g. N.T. 6, 42); in the second instance the authorship is further proved by the spelling ποιησηται (for ποιήσητε), for A constantly writes -αι for -ε in the termination of the 2nd person plural, whereas only thrice (and all in the same word, ἔστε[2]) does D err in this way, his lapses being probably due to misapprehension rather than ignorance. A further peculiarity of the corrections marked with this type of arrow is the fondness for ligatures of two

His spelling and other marks

[1] Cf. also the triangular shape of D's notes in e.g. O.T. 2^b, 6^b, N.T. 8^b, 9^b, 12^b, 40^b.

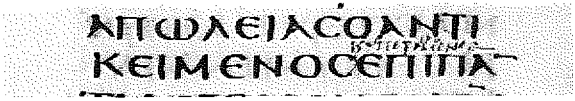
[2] Viz. 1 Thess. ii. 20, v. 4, v. 5; moreover in the last case the scribe corrected himself.



D: ουκ in oblique script *N.T. 63b*

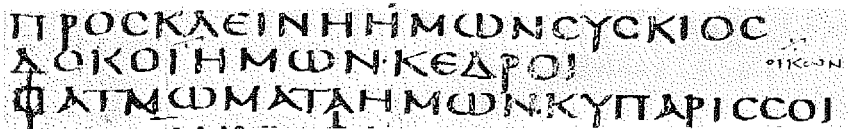
D: Oblique script Carets > *N.T. 85*

D: Carets > *N.T. 74*

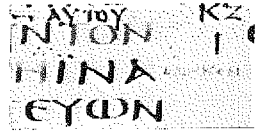


D: Oblique script ϗ compendium *N.T. 89*

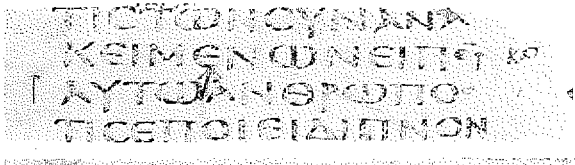
D: Mixture of upright and oblique script *N.T. 77*



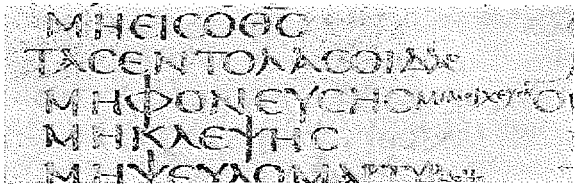
D: Correction in Song of Songs *O.T. 194*



D: Carets *N.T. 49*

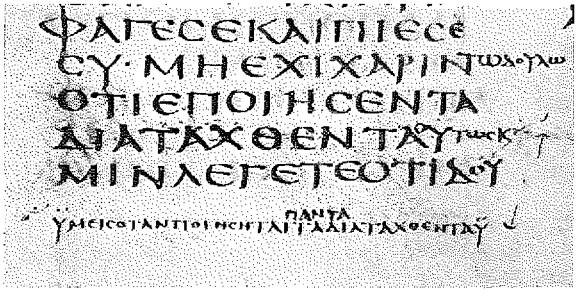


A: Arrows κατ(ω) *N.T. 40b*

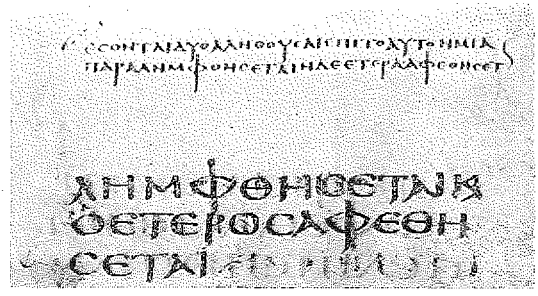


A: Ligature ΗΜ Sloping script *N.T. 24b*

A: Arrows Spelling απολεσει Ligature ΗΝ *N.T. 6*



A: Arrows ϗ compendium Spelling ποιησηται *N.T. 42*



A: Arrow Carets *N.T. 42b*

FEATURES OF CORRECTORS: SCRIBES D AND A

or (as in N.T. 44) even three letters, a space-saving device common to all scribes of the text, but especially favoured by A. In corrections it seems to be almost exclusively used by A, the only examples in D's corrections[1] being in O.T. 24 and N.T. 7[b].

His carets

Another distinguishing mark of A's corrections, especially the shorter ones in the early part of Luke, is the use of a caret of this shape , the slanting stroke ending in a pronounced hook, and standing closer to the lower dot than to the upper. For proof of this identification two examples must suffice: N.T. 30, where it occurs in conjunction with the angular και compendium, and N.T. 32[b], where both the compendium and the spelling of the correction itself, και διξον σεαυτον τω ιερι, point to A.

Reclassification: the 'A' correctors

With the aid of these conclusions, and others which can readily be inferred, most of the corrections grouped by Tischendorf and Lake under the headings A and B should be reclassified as follows (the examples given are those reproduced by Lake, N.T., pl. II):

'A[1]' represents the corrections in full-sized uncials over erasures of the original text. The abnormal conditions under which such corrections are made usually preclude any positive assignment. In some cases the addition of a filling mark identifies D as the corrector; in others, the general appearance points to A.

The 'A[2]' corrections are mostly by scribe D, except for the first, second, fourth, and fifth examples reproduced by Lake, which are by A; the first (Matt. v. 45) is treated in detail below (p. 44).

The 'A[3]' corrections are probably all by A except the last example, which is certainly D.

'A[4]' is difficult to judge, but the και compendium in the very next line to Lake's first example, the caret in his second, and the marked difference of the third and fourth from the admitted D corrections in the same part of the manuscript, combine to identify the hand as A.

'A[5]' and 'A[obliq.]' have already been identified as D (above p. 42).

'Doubtful cases': the second of these (on a cancel-leaf) is by D, the rest by A.

'A[Herm.]', the microscopic hand which has corrected Hermas, is found elsewhere only in the Prophetic books of the Old Testament, and since the Prophets and Hermas are precisely the parts of the

[1] The first instance must be ascribed to D, since A never corrects D's text. The second is assured as D's by the shape of the και compendium.

book written by scribe B, there is every reason to regard 'A$^{Herm.}$' as simply his script when correcting his own work—a task left exclusively to himself, for reasons easily appreciated, by his more literate colleagues. The errors of spelling which the Hermas corrections contain are indeed alone sufficient to demonstrate their authorship.

A much-discussed passage

One passage mentioned above (N.T. 3, Matt. v. 45, end) has led to some confusion. Tischendorf held that the writer of the text originally stopped at αγα|θους, and that the six words και βρεχι (*l.* βρέχει) επι δικ(αι)ους κ(αι) αδικους were supplied later by D, the first three in full-sized uncials filling up the line to its normal length, the rest in a small, fine hand, using two καί compendia. Lake, on the other hand, implies (N.T., p. xxii) that the three words in uncials form part of the original script. The colour of the ink, however, which differs noticeably from that of both the preceding and succeeding text, supports Tischendorf. It follows that the rest of the clause must have been written by the same scribe at the same time; for though it is conceivable, as Lake points out, that the scribe in the first instance might have broken off at επι, it is inconceivable that a corrector deliberately revising the text should have done so. Lake indeed seems to have misread Tischendorf; at least we have noticed no authority for his statement that 'Tischendorf thought he had found a convincing proof of the identity of A^2 with scribe D in the correction to Matt. v. 45', nor did Tischendorf, so far as we can ascertain, ever argue that 'no one would break off in the middle of a sentence with επι'. Tischendorf's sole purpose in quoting the passage was to prove that a scribe could combine full-sized uncials and small letters in the same correction.

Spelling decisive for scribe A

In reality the correction is due to A alone (Fig. 14). For the uncial part the kappa favours A, but the decisive point is the spelling -ι for -ει in the third person singular (βρεχι), an error common in A but unexampled in D. In the smaller script, the shape of the καί compendium and its use in the middle of a word (see above, p. 22) both indicate A; in fact, it is simply a further example of his type of hand which Lake calls A^4. Other examples of the use of uncials and small letters in the same correction may be seen in O.T. 10^b (by D), 77^b (by B) and in N.T. 2^b, 6^b, 54^b, and 59^b (all or most by D).

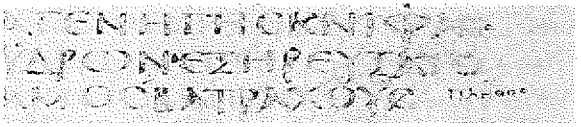
A: Ligatures HN THN *N.T. 17b*

A: Ligature NM *N.T. 44*

A: Ligature and compendium NC *N.T. 21b*

A: c compendium Carets *N.T. 30*

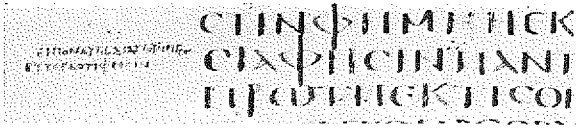
A: Carets Spelling ειδεα *N.T. 18*



A: Carets (in Wisdom) *O.T. 205*

B: Spellings χιρι, εινα, ιασεν (Hermas) *N.T. 143b*

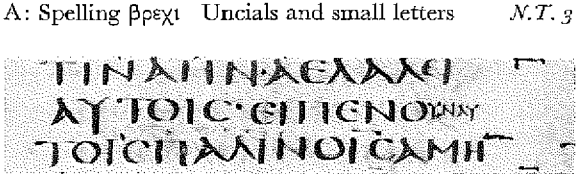
B: Arrow ⊱ in correction since erased *O.T. 128b*



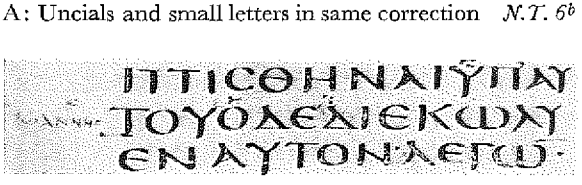
B: Carets (Hermas) *N.T. 143*

A: Spelling βρεχι Uncials and small letters *N.T. 3*

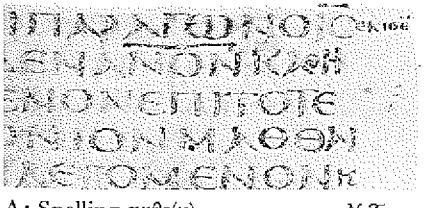
A: Uncials and small letters in same correction *N.T. 6b*



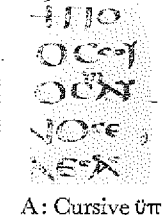
A: Uncials and small letters in same correction *N.T. 54b*



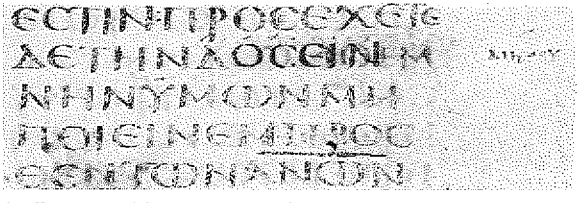
A: Spelling ϊωαννης *N.T. 2*



A: Spelling εκιθε(ν) *N.T. 5*



A: Cursive ὑπ *N.T. 40b*



A: Reverses his own correction, restoring δικαιοσυνην *N.T. 3*

FEATURES OF CORRECTORS: SCRIBES A AND B

'B' and 'B^a' correctors

The corrections denoted B by Tischendorf and Lake all occur in the first few pages of Matthew. As Tischendorf had himself seen, they form part of an ambitious scheme of correction, annotation, and general improvement of the text, which we have already attributed to scribe A himself (p. 37 above). We have there shown how A soon tired of his task, and within the space of a page or two successively discarded the marking of Old Testament quotations, accents and breathings, paragraphi, and the Eusebian apparatus. The true 'B' corrections cease somewhere about the same point, but in a modified form the same script recurs sporadically, and gradually merges into A's more usual type of correcting hand (Lake's A^3). As for the 'B^a' corrections, neither Tischendorf nor Lake gives any concrete reasons for differentiating them from 'B', and the distinction may therefore be disregarded. Some positive proofs for assigning both the 'B–B^a' corrections to scribe A may be found in the spelling of ιωαννης (N.T. 2) and εκιθεν (N.T. 5), the use of the και compendium in the middle of a word, for example, δικ(αι)οσυνην (N.T. 3), and in certain details of the caret.

Nature of 'A' and 'B' corrections

The source of the 'A' and 'B' corrections has never been fully explored. There is evidence in the case of the 'superfluous leaves' (cf. above, p. 2) that the primary revision was made from the actual exemplar and that exemplar alone. Naturally the reviser's first concern would be to make sure that he had taken down the exemplar accurately, and most of the corrections appear to be of this type. In the New Testament, however, there are signs of a further revision, of actual collation with another textual tradition, in such alternative readings as the marginal οι δε μαθηται in Matthew xiv. 26 (N.T. 9, col. 2). But whether such variants were already recorded in the exemplar or transferred from other manuscripts cannot as a rule be ascertained. In a few passages, however, by some oversight, two alternatives are both incorporated in the body of the text; here at least it is obvious that both were present in the exemplar, where alternative readings may have been written over the words they were intended to replace, without any actual deletion of the latter, and so mistaken for additions to the text. For examples cf. Isaiah xxviii. 22, where the variants οι δεσμοι οι οφθαλμοι are both found in the text; Isaiah xxiv. 7, where the scribe originally began to write ο πλουτος των ασ (i.e. ασεβων, the reading of Q), then corrected to των εθνων απαντων (των εθνων

Was there collation with other MSS.?

παντων AΓ); Isaiah xxix. 11, where the original reading of the manuscript is ταυτουτο, corrected by C^a to ταυτα, by C^{b2} to τουτο.[1]

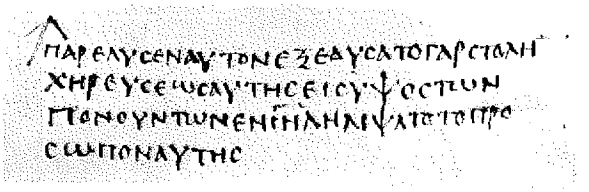
2. THE C CORRECTORS

THE only remaining correctors of any importance are those of Group C. This comprises, in the classification of Tischendorf and Lake, the individuals C^a, C^b, C^c, C^{c*}, while Lake (O.T., p. xxi) uses the term $C^{Pamph.}$ to designate the scholar who collated Kings to Esther with the manuscript of Pamphilus and Antoninus, and whom Tischendorf originally equated with C^a.

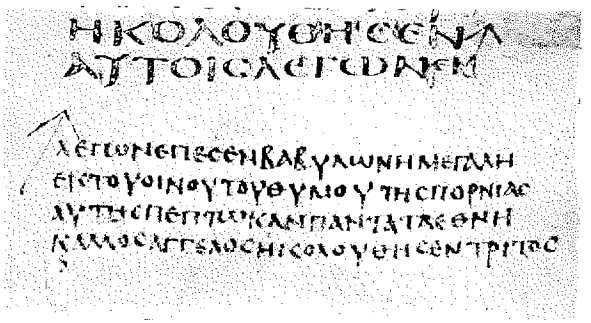
C^a C^a is the most easily recognized of all the correctors of the manuscript, his distinctive orange-brown ink and peculiar script, with the consistency of his habits, making it possible to assign even the shortest corrections to him with absolute certainty. His activity ranges over the entire book with the exception of the 'superfluous' leaves of 1 Chronicles (the text of which he had presumably already corrected in the duplicate leaves, cf. above, p. 2), and the Epistle of Barnabas, for which he may have lacked another exemplar. C^a's methods are simple. Only on rare occasions does he erase and rewrite the original text. Smaller corrections, amounting to a few letters only, are entered above the lines in the text, and often there is nothing but the context to show whether they represent additions to, or substitutions for, the words or letters over which they stand. Sometimes, however, the letters to be deleted are obelized, expunged, or both. Longer corrections are set in the side-margins and marked with a single wavy caret, to which another caret within the text responds; these carets also are ambiguous, standing equally for an addition or a substitution. Insertions of any length are relegated to the upper or lower margins, and, in addition to the usual carets, are furnished with arrows; unlike the opposed arrows of the first correctors, these point in the same direction, upwards in the case of corrections in the lower margin, downwards for those in the upper margin.

$C^{Pamph.}$ The $C^{Pamph.}$ corrections are confined to the Leipzig portion of the manuscript, and therefore lie strictly outside our purview, nor could we here examine the original. However, the evidence of the

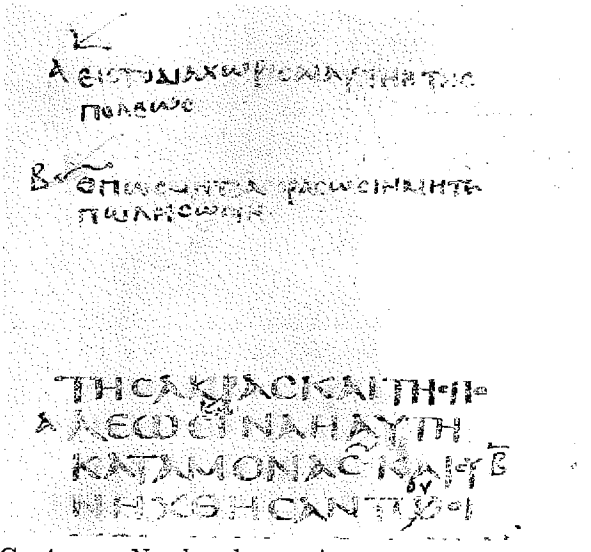
[1] Other examples are quoted by Scrivener, *Collation*, pp. li–lii. Cf. also Luke xii. 29, xxii. 25, where the scribe embarked on harmonistic readings, but corrected himself in time.



Ca¹ *O.T. 37*

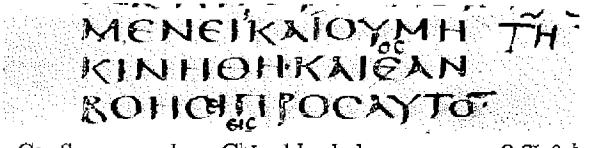


Ca: Arrows (pointing in same direction) *N.T. 131*

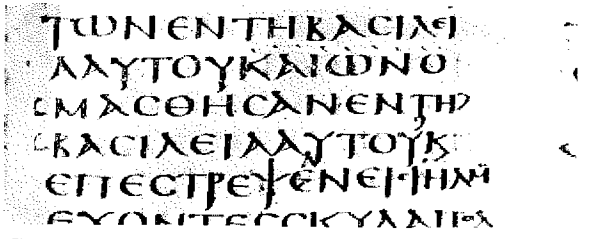


Ca: Arrows Numbered corrections *O.T. 52*

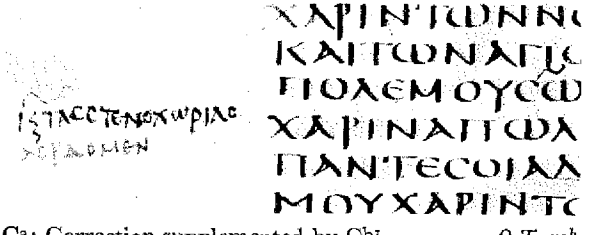
Ca: Expunction Transposition Caret *O.T. 58*



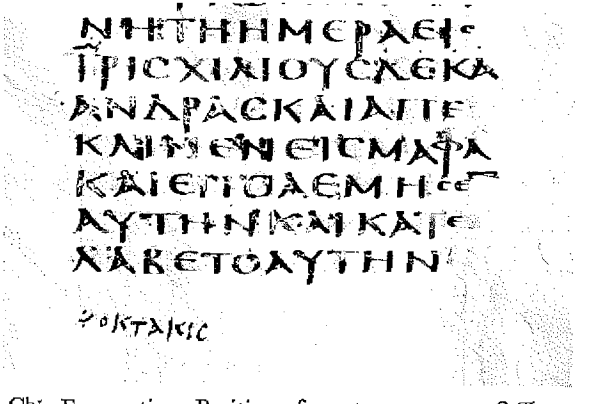
Ca: Superposed ος Cb¹ adds obelus *O.T. 82b*



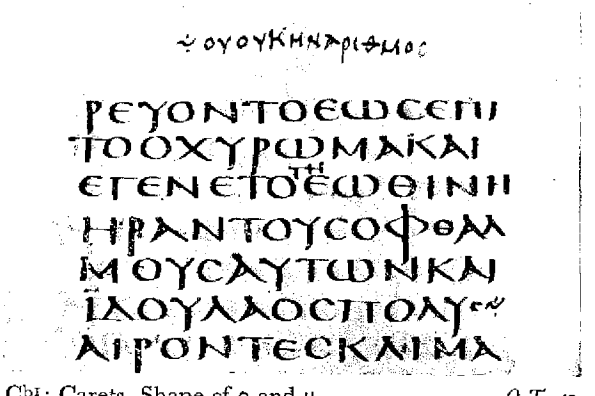
Ca: Expunction Deletion hooks *O.T. 51*



Ca: Correction supplemented by Cb¹ *O.T. 52b*



Cb¹: Expunction Position of carets *O.T. 43*



Cb¹: Carets Shape of ρ and μ *O.T. 43*

FEATURES OF CORRECTORS: Ca AND Cb¹

facsimile appears completely to substantiate Lake's view that $C^{Pamph.}$ must be distinguished from C^{a}, from whom both in forms of letters and method of correction he noticeably departs. Moreover, $C^{Pamph.}$ is demonstrably later in date, for in O.T. 21, col. 3, his addition of κ(αι) απωλεσαν obviously presupposes the existence of τη πολι απεκτιναν added by C^{a}, while in O.T. 15^{b} a deletion hook by C^{a} in col. 2 is seen to be unaffected by, and therefore earlier than, an addition by $C^{Pamph.}$ between cols. 1 and 2.

C^{b} correctors:

In isolating the corrector whom they designated C^{b}, both Tischendorf and Lake have, it seems, been misled by relying primarily on the evidence of the New Testament, in which all the corrections so assigned are undoubtedly by one and the same hand. In the Old Testament, however, C^{b} includes the work of at least three different scribes, among them the corrector of the New Testament. To distinguish them without disturbing the established nomenclature, we have named them C^{b1}, C^{b2}, and C^{b3}, of whom C^{b2} is the New Testament corrector. The characteristics of these three hands, the reasons for distinguishing them, and the order in which they worked on the manuscript, may be summarized as follows:

C^{b1}

C^{b1} corrects 2 Esdras, Esther, Judith (the first page only), 1 and 4 Maccabees, and, though very sparingly, the Prophetic books. That he followed $C^{Pamph.}$ is indicated by a passage already discussed, O.T. 15^{b}, col. 2, where in emphasizing a series of deletion hooks by C^{a} he has been forced to write one of them further to the right because of an addition made by $C^{Pamph.}$ to the text of the preceding column. He employs a small, neat script and black-brown ink. Characteristic letters are mu and rho (cf. Fig. 15). In identifying his hand it is essential to note that many of his corrections in the Prophetic books have been touched up by C^{b2}, who alters the character of the script by adding his own 'feathers' to the descending letters (cf. Fig. 16). As carets, C^{b1} uses ÷ and (though rarely, and only in the Prophetic books) ⁄, both for addition and substitution.[1] In the Prophets the resulting ambiguity has been repeatedly clarified by C^{b2}, who has superposed his own caret and dash method (see below) of indicating substitutions.

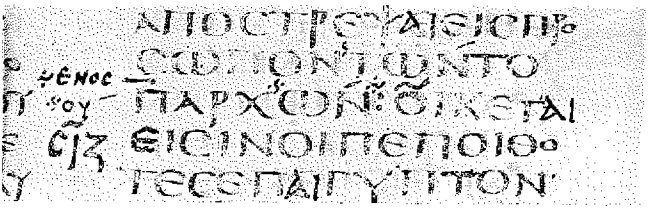
C^{b1} alters the manuscript in various ways, sometimes erasing

[1] It is worth noting that in substitutions C^{b1} places the caret in the text immediately to the right of the first letter of the word to be deleted.

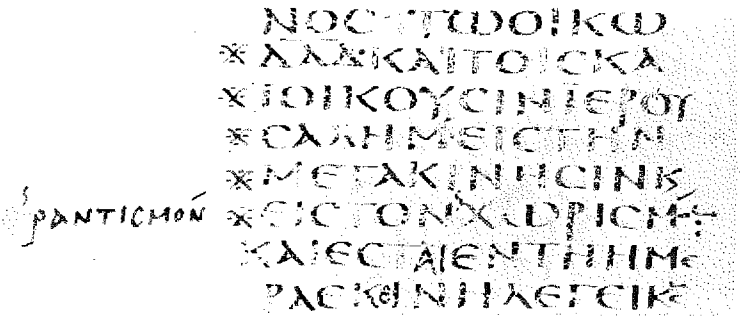
and rewriting the original text, sometimes expunging letters by a large carefully placed dot, with or without an obelus. In the Prophets this last form of correction is almost confined to condemnation of superfluous ε in certain words, notably ειναι, ειδου, κατεγεις. C^{b1} makes a special point of emphasizing C^{a}'s corrections, frequently supplementing the latter's expunctions with obeli, and, in passages C^{a} intended to delete, adding or rewriting the deletion hooks. Very characteristic are his double hooks (ʆ, ʅ) at the beginning or end of a lengthy deletion.

C^{b2} C^{b2}, easily the most important of the C group after C^{a}, and a genuine redactor, corrects Genesis, Numbers (?), the Prophetic books (excepting Jeremiah and Lamentations) and the Gospels. That he follows C^{b1} is proved by his overwriting of the latter's corrections (see p. 47 above), while further confirmatory evidence is provided by O.T. 77^{b}, where the addition ενος by C^{b1} has almost certainly affected the position of ου added by C^{b2}. Furthermore, in O.T. 64^{b}, col. 1, the double hooks placed by C^{b1} at the beginning of a deletion have squeezed to the right a caret of C^{b2} (the opposite effect, a C^{b2} dash pushed to the left, is illustrated in O.T. 73, col. 4, and 121^{b}, col. 4). C^{b2}'s hand is marked out by the 'feathers' attached to the tips of the descending letters; mu and rho are the distinctive letter-shapes. He employs for additions a great variety of carets ˆ ˇ ʃ ·ʃ· ʆ either singly or in combination, while deletions are marked by a caret, usually upright ʃ or ·ʃ· at the beginning of the word cancelled and a sloping dash / at the end, the word or letters to be substituted being placed in the margin and similarly marked. His corrections are nearly all set in the margins; only rarely does he make an interlinear addition, and though he occasionally erases or alters the text, it is not his usual practice, and he clearly prefers to do all his work by critical signs alone.

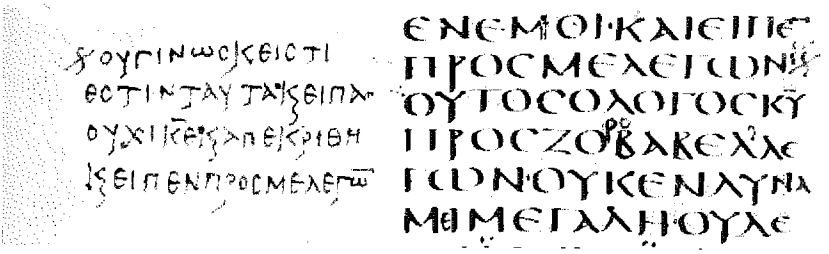
C^{b3} C^{b3} corrects the Prophetic books only, and is mainly preoccupied with orthography and legibility. He is clearly different from C^{b2}, as his work continues in Jeremiah and Lamentations, where the characteristic caret-and-dash of C^{b2} is absent; and though evidence to prove him later than C^{b2} is remarkable scanty, it is enough for a definite decision. In a few cases he has transferred a C^{b2} correction from the margin to the text, as ζυθον (for ζυγόν) in O.T. 71, col. 3, and βοθυνος (for βόθυνον) in O.T. 83, col. 1, while



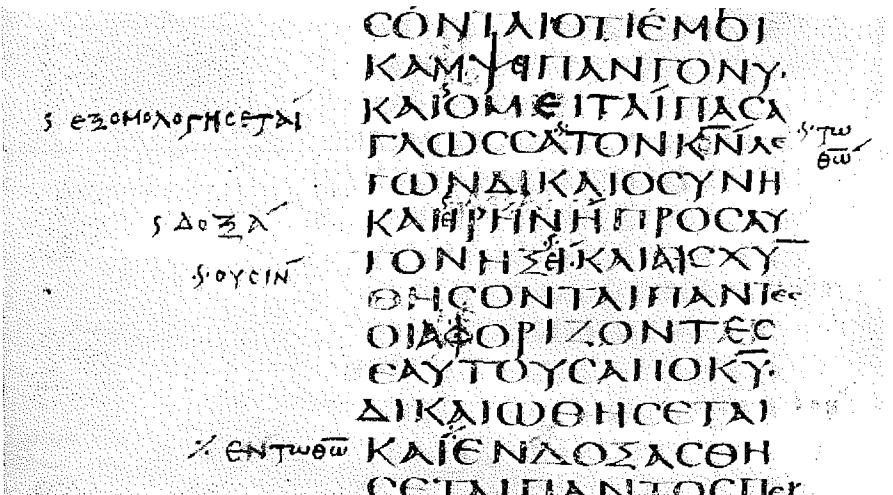
C^{b1} correction ενος earlier than C^{b2} ου *O.T. 77b*



C^{b1} correction touched up by C^{b2} (carets altered) *O.T. 131b*

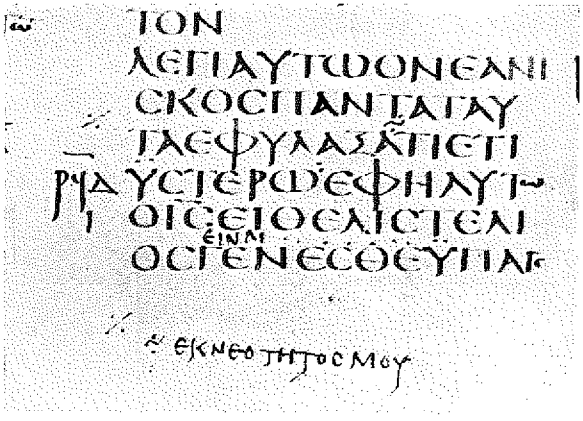


C^{b2}: Carets Shape of ρ and μ 'Feathers' *O.T. 128b*

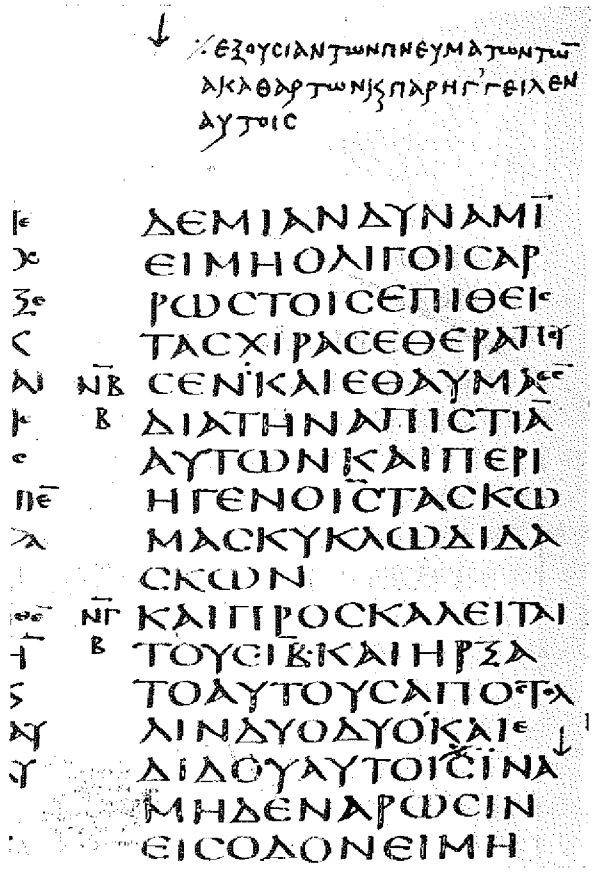


C^{b1} correction εξομολογησεται touched up by C^{b2}. Marginal corrections by C^{b2}: τω θω, δοξα (replacing C^{a}'s δοξα erased), ουσιν, ον (later erased by C^{b3}), εν τω θω. Removal of interlinear corrections and revision of orthography by C^{b3}: καμψει, ομειται, κν, ειρηνην, ηξει, αισχυνθησονται, αφοριζοντες. *O.T. 82b*

FEATURES OF CORRECTORS: C^{b1}, C^{b2}, C^{b3}

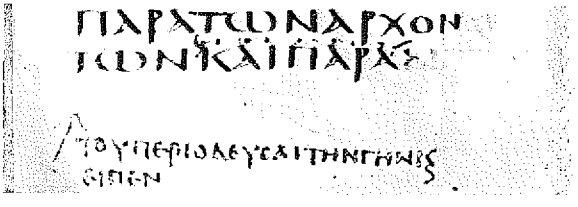


C^{b2}: in N.T.: Double carets 'Feathers' *N.T. 11b*

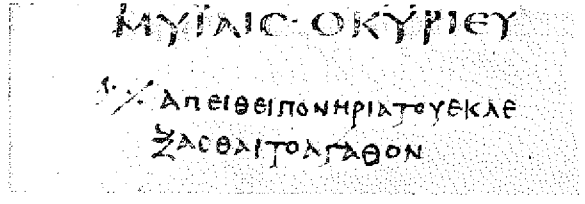


C^{b2} erases and rewrites in larger script correction by scribe A *N.T. 21b*

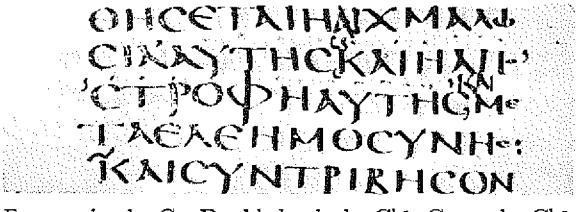
C^{a} hooks and expunction C^{b1} doubled hook at end of deletion C^{b2} caret and dash *O.T. 72b*



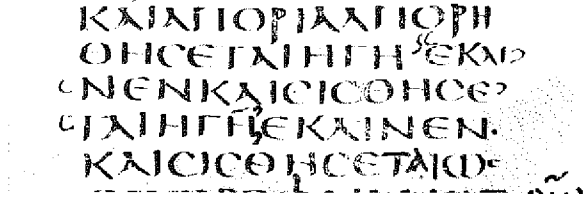
C^{a} expunction C^{b2} caret and dash γω̄ at end of line deleted by original scribe *O.T. 129*



C^{b2}: Double caret *O.T. 66b*



Expunction by C^{a} Double hooks by C^{b1} Carets by C^{b2} *O.T. 64b*



Hooks by C^{a}, last one doubled by C^{b1}, caret and dash by C^{b2} *O.T. 73*

FEATURES OF CORRECTORS: C^{a}, C^{b1}, C^{b2}

in O.T. 87, col. 1 he has damaged in erasing, and rewritten, a C^{b2} caret. Finally, we may quote an elaborate instance of the multiplied activities of successive correctors, O.T. 88^{b}, col. 1 (see Fig. 18). Here the original scribe wrote ΤΑΪΜΑΤΙΑ; C^{a} corrected to τὰ αἵματα by adding an alpha and obelizing the second iota, ΤΑ^{a}ΪΜΑΤ$^{\prime}$Α; C^{b2} altered to τὸ αἷμα thus: ⁅ο Τ^{f}Α^{a}ΪΜΑ^{f}Τ$^{\prime}$Α$^{\prime}$, seemingly ignoring the small alpha of C^{a} (or cancelling it in some way no longer visible); lastly C^{b3}, confirming C^{b2} in reading τὸ αἷμα, sought to increase the legibility of the text by (1) deleting the marginal ⁅ο of C^{b2}; (2) erasing the first alpha of the text and filling its place with omicron; (3) touching up the alpha added by C^{a}; (4) emphasizing the caret and dash enclosing ΤΑ and completely erasing the already obelized iota.

An argument against the priority of C^{b2} to C^{b3} might be sought in the fact that C^{b3} frequently corrects the spelling or makes other alterations in words already cancelled by C^{b2}. But the explanation seems to be that C^{b3} did not fully understand the critical signs of C^{b2}, or at least did not necessarily accept his readings. An instance of superfluous correction of this kind will be found in the very passage just discussed, where although apparently accepting the deletion of all the last three letters ΤΙΑ he none the less completely erased the iota.

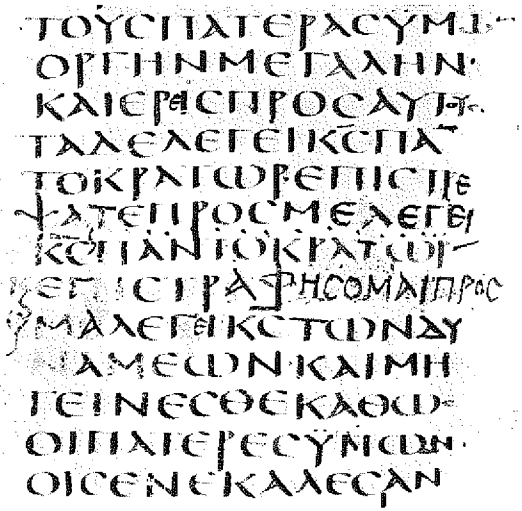
While C^{b3}'s main object is to increase the legibility of the text, usually by normalizing the orthography of the original scribe, he possesses a certain textual importance as well, for he has frequently erased an addition or substitution by C^{b2}, and sometimes (but much more rarely) one of C^{a}. But whether these alterations imply collation with another copy may well be doubted, as the effect in every case is purely negative. So far as our observations go, C^{b3} makes practically no positive and original contribution to the text.

C^{c} resembles in general the other C hands, but is much rougher and uses a blacker ink. In the Old Testament he adds the section numbers in Isaiah and makes a single correction in the text (O.T. 77^{b}, col. 4); in the remainder of the Prophets, and in the Poetical books, his work usually amounts to little more than a rewriting or retouching of alterations by the original scribe or C^{a}, but he makes a few positive contributions, particularly in Job; in Psalms and Proverbs his chief activity seems to lie in erasing C^{c}

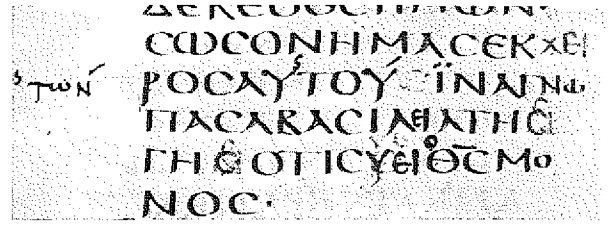
corrections by C^a. In the New Testament he corrects the first two pages of the Apocalypse (all the subsequent corrections in that book assigned to him by Tischendorf being in reality from the pen of C^{c*}), and the Epistle of Barnabas (where Tischendorf in his commentary refers to him merely as C, since no other C corrector touches this book). His alleged correction of John xiii. 26 (Scrivener, *Collation*, p. xxiii) rests on a misprint for C^a in Tischendorf.

That C^c is later than C^{b3} is evident from O.T. 86^b, col. 3, where the sign marking the beginning of section $\overline{\text{ττβ}}$ is written over a correction by C^a erased by C^{b3}. Cf. also §§ $\overline{\text{να}}$ (O.T. 67^b) and $\overline{\text{σοα}}$ (O.T. 80^b), written out of place because of C^{b3} corrections in the text. Whether, as Tischendorf thought, he added the ⳨ (ὡραῖον) signs in various parts of the manuscript seems very doubtful. His critical signs and methods of employing them resemble those of C^{b2}, but in his use of the horizontal wavy caret for substitution (ατοπα, O.T. 243) and the supplementary arrow (O.T. 227^b) he shows affinity with C^a.

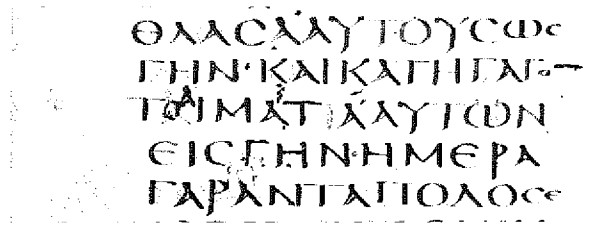
C^{c*}, with a straggling, sloping hand of semi-cursive type, confines himself to the Apocalypse, where he takes up the task abandoned by C^c. His first correction is σκηνωσει (N.T. 129, col. 1). He adds to a supplement of C^a in N.T. 132^b, but there is nothing to indicate his relationship to the other C hands. Probably he is a good deal later than any of them, as he freely uses the ϯ ligature for στ, a form which seems not to occur before the eighth century, although its genesis may reach back to the seventh. His only correction sign is ⁒ and his expunctions consist of very closely placed dots.



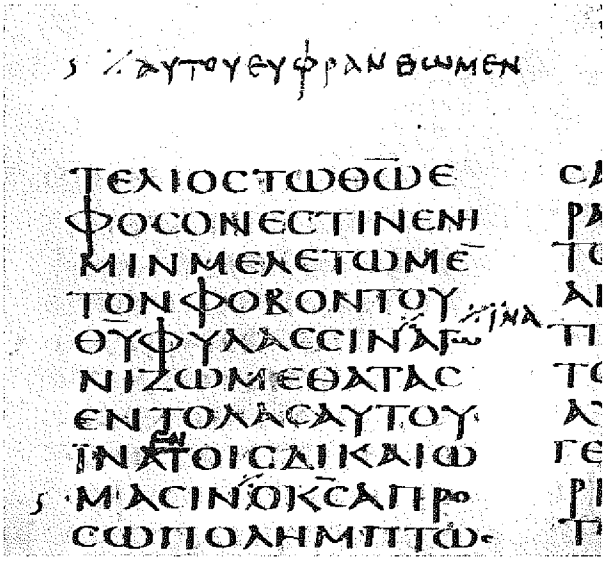
Ca²'s επιστραφησομαι προς υμας set in text by Cb3 *O.T. 127b*



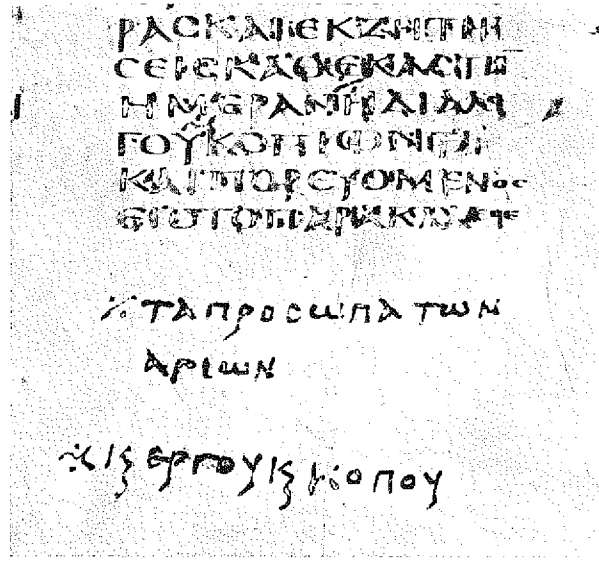
Ca²'s της γης οτι συ ει set in text by Cb3 *O.T. 78b*



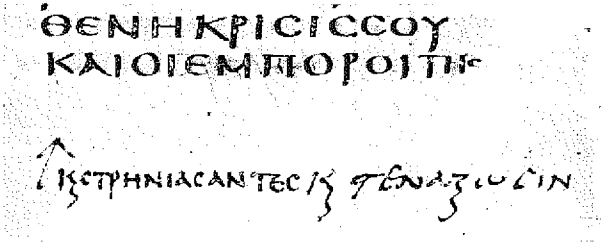
τα ιματια corrected by Ca, Cb2, and Cb3 *O.T. 88b*



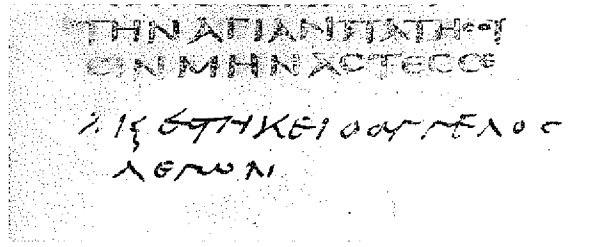
Cc: Double carets *N.T. 136*



Cc: Types of caret *N.T. 141*

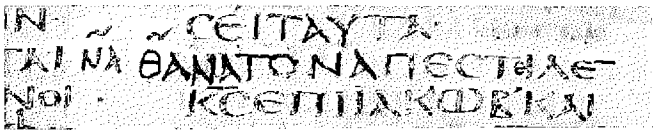


Cc* supplements a correction by Ca *N.T. 130*



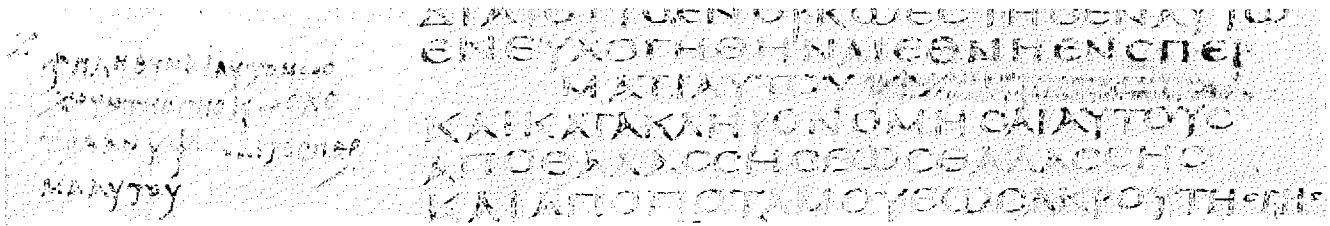
Cc*: Caret στ ligature *N.T. 132*

FEATURES OF CORRECTORS: Cb3, Cc, Cc*

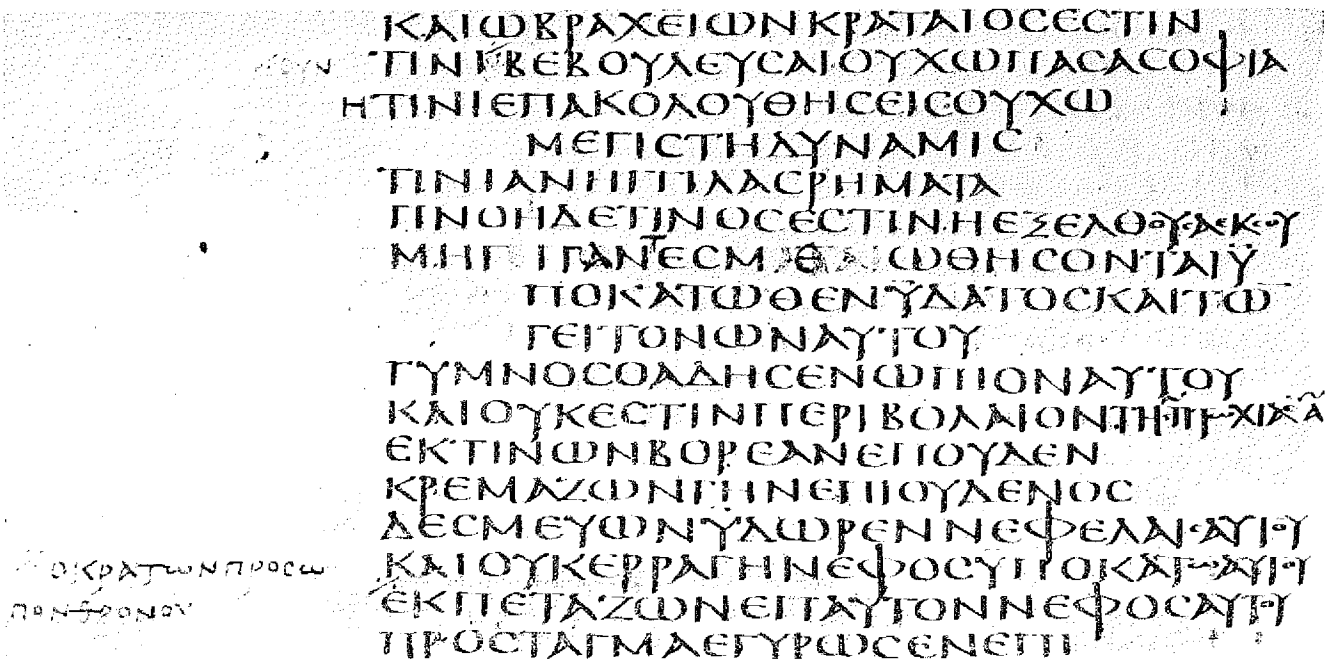


Cc's NA displaced by Cb3's correction θανατον *O.T. 67b*

Cc reference-mark over erasure by Cb3 *O.T. 86b*



Cc erases correction by scribe A and rewrites it in margin on larger scale *O.T. 227b*



Cc erases correction by scribe A and rewrites it in margin on larger scale *O.T. 239b*

FEATURES OF CORRECTORS: Cc

FIGURE 19

VII. ORTHOGRAPHY AND THE DICTATION THEORY

AN exhaustive survey of the spelling of the original scribes has never been attempted, and indeed would require a separate study. From one point of view it might be thought superfluous, since the scribes of the main text can be identified with certainty by other and more obvious criteria. But there is one sphere in which mannerisms of spelling can prove of considerable assistance, namely in cases where A and D are both at work either on the correction of the text or on the subsidiary apparatus, and are in consequence using their smaller script, in which their hands become even more alike than in the main text. In several of these passages a slight variation in spelling is the sole means of identifying the writer.

Spelling as a criterion between A and D

1. INDIVIDUAL ORTHOGRAPHY

THE orthographical peculiarities of each scribe can be most readily estimated from Swete's edition of the Old Testament; here the major eccentricities of spelling, as well as all which involve or accompany any important variant, are included in the main apparatus at the foot of the page, mere itacisms and minor errors being relegated to an appendix. Scrivener's *Collation* provides similar information for the New Testament, itacisms and so forth being followed by the sign √, and thus easily picked out. It is, of course, obvious that this only gives us the cases where the spelling is incorrect; to find where it is correct, recourse must be had to a concordance, and the instances of incorrect spelling deducted. Such a procedure is rendered necessary by the inconsistency of the scribes themselves; thus, to take a few examples from that most correct writer D, the spellings ισχυει for ἰσχύι and γιτων for γείτων are chronic; on the other hand, ἀλήθεια is always correct except for αληθιαν (accusative) in Ps. lxx. 22. Between these two extremes come cases like the verb κρίνειν, which in the Psalms D spells correctly twenty-one times, and incorrectly (viz. κρεινειν) seven. Similarly, even in his commonest errors, μεισω, ταπινω for μισῶ, ταπεινῶ, D can on occasion drop into the correct spelling (e.g. μισων, Ps. liv. 13; ταπεινωσεις, Ps. xvii. 28; ταπεινωσει, Ps. lxxi. 4).

Spelling statistics

Scribes not always consistent

Kinds of error For present purposes deviations from standard orthography may be traced to three main sources:

Colloquialisms (*a*) Colloquialisms, introduced from the spoken language. These form a large and miscellaneous class, not by any means to be regarded as all equally reprehensible. A clear distinction was felt between, for example, the mere omission of iota adscript and *Degrees of vulgarity* downright vulgarisms like χειραν for the accusative of χείρ; and though no hard and fast line can be drawn, the evidence of manuscripts which in other respects are carefully and correctly written enables a rough division to be made into reputable and less reputable forms. In the reputable class we would include, beside the omission of iota adscript already mentioned, spellings characteristic of Hellenistic Greek such as γεινομαι, ερανυω, λημψομαι, ολοθρευω, ανυγω, κιθων, κυθρα, etc.; omission or unnecessary insertion of ν ἐφελκυστικόν; assimilation or non-assimilation of consonants (εμ μεσω, ενχρεισαι); retention of final -ς in ουτως before a consonant; and various inflectional changes which, as far as the Sinaiticus is concerned, are well summarized by Scrivener, *Collation*, pp. liv–lvi. To the less reputable class should be assigned the erroneous addition of -ν to accusatives ending in -α or -η, such as χειραν, τιναν, αυτοκρατοραν, ποιμεναν, ασεβην and the spellings ατων for αὐτῶν or εμεν for ἐμέ.

Phonetic errors (*b*) Phonetic errors, caused in our view either by the scribe mishearing what was read out, or choosing the wrong notation to represent it. Errors of the former kind include frequent interchange of liquids (e.g. βερτιων for βελτίων, εσπελας for ἑσπέρας), or stops (e.g. γλυδων for κλύδων, εκθρος for ἐχθρός, θυπης for τρυφης, Ιωσηφ ως for Ἰώσηπος), telescoping of words (e.g. ιπποσου for ἵππους σου), and wrong divisions (e.g. εξου for ἐκ σοῦ). Errors of notation can again be separated into reputable, such as frequent interchange of ι and ει, and less reputable, including confusion between ε and αι, and between various members of the group ει, η, ι, οι, and υ, pronunciation of which had by this time become practically identical. Less reputable also are the frequent confusions originating in the transformation of β and γ from a stop to a glide (e.g. φοιιν for φυγεῖν, λει for λέγει, and conversely λεγοντας for λέοντας, χαυβωνας for χαυῶνας).

Scribal lapses (*c*) Indefensible blunders, whether due to misreading on the part of the ἀναγνώστης, or carelessness of the scribe. Examples of

the former are απαται for ἁγιάσαι, due to a misreading of ΓΙ as ΠΙ; οικουβενην (cursive μ misread as β, or the reader had a cold); φθυοντες for φεύγοντες (ε mistaken for θ). Scribal blunders take the form of simple omission of letters or syllables, e.g. υ(λ)ωρ, σα(ρ)ξ, ι(ου)λα; simple insertion, π{ρ}οιηση, λορ{μ}ατα; haplography, ε(πι) ιππον; dittography παιλα{λα}, φωνη{νη}, λο{λο}γος; metathesis (πλολω, λρακυ, σαραξ' πο for σαρξ απο), and other perversions (e.g. φοντιον for φορτιον)[1] for which no reason can be conjectured.

Scribe D

The scribes of the Sinaiticus may now be examined in the light of the foregoing distinctions, beginning with D, the most correct, who alone reaches the standard of good literary papyri. Nearly all D's errors are of the kinds which we have named more reputable, chiefly the substitution of ει for ι and ι for ει in medial positions, both being about equally common. Substitution of ι for initial ει is unknown, and for final ει is practically limited to the third declension dative singular (e.g. καλλι, λυναμι), and, in marked contrast to the practice of the other two scribes, never occurs in verbal terminations, while ει for final ι is found only in the word ισχυει. The worse type of phonetic error, as confusion of ε and αι, is very rare, and in several cases appears to be due to confusion of thought rather than ignorance, since the form substituted is nearly always an actual Greek word (e.g. εξελουμαι for ἐξελοῦ με in Ps. lviii. 2, where the confusion with ἐξελοῦμαι is patent). Vulgarisms of the less reputable class, notably the -ν added to accusatives in -α and -η, are conspicuous by their absence. In view of D's general reputation, his usual spelling πακις for παγίς[2] may perhaps be regarded as an admissible variation.

His errors reputable

Comparison with other MSS.

Good parallels for D's general standards of orthography are provided by the Michigan codex of the Pauline Epistles (H. A. Sanders, *A Third-century Papyrus Codex of the Epistles of Paul*, Ann Arbor, 1935) and the Michigan Hermas (Campbell Bonner, *A Papyrus Codex of the Shepherd of Hermas*, Ann Arbor, 1934). In the former, we find the same frequent interchange of ει and ι (ει for ι 130 times, ι for ει 24 times), and the same rarity in confusion of

[1] The interchange of ρ with μ or ν is a curious feature of scribe B; the spellings εφφορησαν for ἐφρόνησαν and ηρερα for ἡμέρα show that it is not merely accidental.

[2] The orthodox spelling occurs, however, in Ps. ix. 16, ix. 31, xxxiv. 8.

αι and ε (10 times).[1] It is true an example of the accusative in -ν (σαρκαν) occurs, but only once. The Michigan Hermas is even more correctly written; it entirely avoids the confusion of ε and αι, and while the substitution of ει for ι is common, the converse change is rare. Other vowel confusions are negligible, and the remaining irregularities in this papyrus all belong to the reputable class. The Chester Beatty papyrus codex of Gospels and Acts clearly surpasses D in accuracy; though ει and ι are very frequently interchanged, ε and αι are apparently never confused, and iota adscript regularly follows η and ω (though not α, where it might have caused confusion with the diphthong αι).[2]

Scribe A Scribe A is markedly inferior to D. A good visual impression of their comparative correctness can be obtained by scanning the appendix to Psalms in Swete, and taking note of the sudden outburst of Alephs which variegate the page as soon as Ps. xcvii. 3 is passed, the point where A takes over from D; a similar impression can be gained in 4 Maccabees, where A succeeds to D in viii. 7.

Much inferior to D In permissible colloquialisms A shows little variation from D, but comparative frequency of the third declension accusative in -αν and -ην (for -α and -η) leaves a bad impression. Far more serious are the phonetic errors. Confusion of ει and ι is rampant; substitution of ι for ει outnumbers the converse by four or five to one, being prominent in verbal terminations where it is rigorously eschewed by D. This decided preference for iota has the unusual result that some words, for instance χιλιας, are spelled correctly by A and incorrectly (χειλιας) by D. On the other hand, -ει for -ι in the termination of the third declension dative singular, confined in D to the single word ισχυει, is repeatedly exemplified in A, e.g. γυναικει (Esth. i. 19), φυλακει (Esth. ii. 3), χειρει (2 Esdr. ix. 11), φοινικει (Song of Songs vii. 7, 8). The confusion of ε and αι can occur anywhere, but in the definite article, apart from a few instances, orthography maintains itself.

Scribe B The habits of B are difficult to describe in moderate language; still more difficult is it to understand how a scribe so careless and illiterate came to be chosen for such a manuscript. He seems to

[1] This may, however, be due not so much to the superiority of the scribe, as to the fact that this particular vulgarism is not so widespread in the third century.

[2] For statistics cf. A. Merk, in *Miscellanea Biblica* (*Scripta Pontificii Instituti Biblici*), ii, 1934, p. 377.

have had no firm visual impression of Greek, so barbarous and grotesque are the forms which his misspellings can present to the eye, and with such utter inconsistency does he sway from correct to incorrect. His aberrations extend over the whole field. Among colloquialisms the third declension accusatives in -ν are extremely common, being practically stereotyped in certain words like αιωναν. Phonetic errors defy reckoning, especially confusions of ε and αι, which abound even in the commonest words and the definite article; and though the orthography of καί is generally respected, κε is found in, e.g., Isa. xxii. 24, Jer. vii. 25, Hermas Vis. II. i. 1. Other vocalic changes, such as υ for οι, ι for υ, are not at all common. Confusion of liquids and of stops frequently occurs, and still more so the vulgar omission (κραυη, φευων) or insertion (λε{γ}οντες) of gamma. Pure blunders, like telescoping of words and omission of letters or syllables, are incredibly common and most of those already quoted on p. 53 are of his creation; more curious is the wrong insertion of the consonant in the middle of the word, as in π{ρ}οιησηι (Jer. xxxvii. 24), λορ{μ}ατα (Jer. xxvi. 4), σα{ν}ρκαν (Jer. li. 35). Another frequent error is produced by metathesis, σεται for ἔσται (Isa. xxxv. 6), λιαμιεν for λιαμένει (Jer. iii. 5), ανλιρ for ἀνλρί (Hermas, Mand. IV. i. 8).

His extreme illiteracy

2. THE QUESTION OF DICTATION

THE evidence set forth above bears directly upon one of the most obscure problems of ancient book-production. Until recent years it had been generally accepted that copies of literary works were multiplied commercially by groups of scribes writing simultaneously from dictation. This view, however, has of late been vigorously challenged by K. Ohly (*Stichometrische Untersuchungen*, *Zentralblatt für Bibliothekswesen*, Beiheft 61, 1928, pp. 123–5), on the grounds that (*a*) Dictation would have made stichometry superfluous, as scribes would then have been paid on a time basis, and (*b*) Mathematical calculations show that a number of scribes copying and recopying by eye would produce the same amount of work in the same time as if dictation were used, and of course far more accurately.

Former prevalence of dictation theory

Contested by Ohly

The traditional view is defended by W. Weinberger, *Zur Diktattheorie*, in *Hermes* 66 (1931), 122–4. His chief point is the obvious one that Ohly's calculations ignore the fact that writing from

Weinberger defends traditional view

dictation is *per se* the faster method; consequently, given an adequate number of copyists, the cost of maintaining an extra employee as reader would be more than counterbalanced by the speeding-up of production. The argument that the existence of stichometry disproves dictation is traversed by Weinberger, and it may be added that, even had dictation been the sole method of reproduction (an extreme view), stichometry would still have been a useful safeguard, ensuring for the scribes the same payment for the same amount of work, and protecting the employer.

Paucity of direct evidence

It cannot, however, be claimed that the question has been decided. The great obstacle to its solution is the extraordinary paucity of evidence, and it is here that the Codex Sinaiticus proves particularly valuable, since it presents almost indubitable signs of having been written from dictation.

Traces of dictation in Sinaiticus

The principal evidence is, of course, provided by the individual peculiarities of spelling which we have just analysed. The consistency with which different sections of the manuscript penned by the same scribe present identical errors, particularly the startling illiteracy of the Prophetic books and Hermas, both written by B, makes it impossible to believe that the book was copied visually from an exemplar.

Alternative explanations unconvincing

It may, of course, be objected that the natural divisions of the Bible, such as the Historical books, the Poetical books, the Prophets, the New Testament, could have been derived from separate exemplars, and that these may have had different orthographic traditions.[1] But even a multiplicity of exemplars cannot possibly explain all the differences in spelling between the three scribes; and in any case it can hardly be supposed that, for example, the copying of 4 Maccabees or Psalms was begun by scribe D from one exemplar, and completed by scribe A from another; or that the first five verses of the Apocalypse are from a different source than the remainder. Yet the changes of hand in these books are exactly reflected in the idiosyncrasies of spelling.

B, at least, must have written from dictation

It is when we come to scribe B, however, that the argument in favour of dictation becomes overwhelming. Can we, for instance, conceive that with a correctly written exemplar in front of him, he would have deliberately produced such perversions as those

[1] But, if these errors were present in the exemplars, this merely pushes the inquiry one stage further back, since it is equally necessary to account for their presence there.

recorded on pp. 53, 55 above? It is true that personal preference might induce a scribe to spell ιωανης, even though his copy had ιωαννης; and there is also such a thing as 'subconscious dictation', the copyist mentally pronouncing what he reads and reproducing that pronunciation. But neither of these explanations can account for the gross errors which disfigure the text of scribe B. Nor can the lapses of scribes A and D, though less startling, be satisfactorily explained except on the same basis.

'Subconscious copying'

One strong argument in favour of dictation remains to be mentioned. In 1 Maccabees v. 20, where the correct reading is $\overline{\text{ΗΗ}}$ (= ὀκτακισχίλιοι), the Sinaiticus has the meaningless collocation $\overline{\text{Η}}\,\varsigma\,\overline{\text{Η}}\,\overline{\text{Η}}$. The only reasonable explanation seems to be that the reader, unable to decipher the numeral in the exemplar, called out ἢ ἓξ ἢ τρισχίλιοι, 'either six or three thousand', and that the scribe mechanically reproduced the remark, his complete confusion being evidenced in the lines, normally denoting a numeral, placed above three out of the four signs. It is, of course, equally possible that the confusion already existed in the exemplar; but in that case the exemplar itself must have been dictated.[1]

Visual errors due to the reader

The existence of visual errors in the Sinaiticus, whether misreadings, omissions, or duplications, is naturally not disputed; but this in no way invalidates the dictation theory, since on this view it was the reader, not the writer, who was at fault.[2]

Objection has been brought against dictation on the ground that it would inevitably result in an enormous number of phonetic mistakes (cf. e.g. W. Schubart, *Das Buch bei den Griechen und Römern*, 2nd edition, 1921, p. 157; Ohly, *Stichometrische Untersuchungen*,

[1] That the Sinaiticus itself, and not merely its exemplar, was dictated, is sufficiently proved by the characteristic spellings of the three scribes. A further argument may be sought in the vacillations of the same scribe in passages which have been erroneously duplicated, e.g. Jeremiah iv. 7, where καθερεθησοντε is written the first time, κατερεθησοντοι the second (O.T. 92, col. iii; scribe B), and 1 Thess. ii. 13 (N.T. 87^{b}; scribe A), where we find ενεργειται, υμις, μιμηται the first time, and ενεργιται, υμεις, μιμηθητε (*sic*) the second. Since both versions purport to reproduce the identical passage in the exemplar, visual copying is debarred. Cf. also Mark viii. 6 (N.T. 23), where the scribe began to write ε(πτα), then changed his mind and wrote the numeral $\overline{\text{Ζ}}$. Naturally the reader dictated ἑπτά, and the scribe had to decide how to represent it.

[2] Prof. H. A. Sanders in his edition of the Freer MS. of Psalms (*The Old Testament Manuscripts in the Freer Collection*, Part II, 1917, p. 118, note 4) accepts dictation as the probable explanation of the misspellings both in that instance and in 'older mss and papyri'.

p. 125). The fact remains that the risk was taken, sometimes with disastrous results, as in the parts of the Sinaiticus written by B; but not inevitably so. We have the evidence of D to prove that a well-trained scribe could write from dictation with a very small percentage of error, and the general correctness of orthography in papyrus texts can now no longer be regarded as proof of visual copying. Ohly makes a good point in suggesting that difficult philosophic or poetical works must have been copied by eye, and certainly it is hard to imagine that even a scribe of D's calibre could have reproduced Sappho or Pindar accurately from dictation. On the other hand, the noticeably inferior orthography of works written in the κοινή, including most Christian literature, or of works universally familiar, such as Homer, indicates that, as we should expect, these were more commonly written from dictation. This is almost certainly the case with the other two Biblical codices, the Vaticanus and Alexandrinus, both of which display palpable phonetic errors, and in which, incidentally, individualities of spellings can equally well be used to differentiate the scribes (cf. below, pp. 87–93). Even the Codex Sarravianus, though on the whole very correctly written, every now and again exhibits spellings which betray dictation; see Tischendorf's statistics in *Monumenta sacra inedita, Nova collectio*, vol. 3, 1860, p. xv.

Abstruse or dialectical works copied by eye

Work in the κοινή or generally familiar copied by dictation

Careful examination of other early Biblical manuscripts would no doubt yield interesting results, and, in fact, the whole question of dictation offers a productive field for study. For instance, Prof. A. M. Harmon has recently inferred that it was freely employed for multiplying copies in the record offices of Graeco-Roman Egypt (*Yale Classical Studies*, iv, 1934, pp. 152–7), and though, of course, this proves nothing for literary manuscripts it is at least important that the use of dictation for this purpose was a perfectly familiar process. Amélineau (*Œuvres de Schenoudi*, i, 1907, p. xxix) notes that at the present day Coptic scribes write from dictation, and considers that medieval Coptic manuscripts were produced in the same way—a supposition amply supported by the multitude of phonetic errors they exhibit.

Use of dictation in records

If we may hazard a guess, it is likely that so long as book-production remained a secular activity, dictation was largely if not exclusively employed; with the rise of monasticism, however, it seems to have practically disappeared (except perhaps in

Dictation abandoned in monasticism?

Egypt), and certainly the vast majority of medieval manuscripts were visually copied (cf. W. M. Lindsay, *Palaeographia Latina*, Part II, pp. 28–9).

In conclusion, the fact that the Sinaiticus was undoubtedly written from dictation, though not of primary importance for textual criticism, should henceforward be taken into account in cases where variant readings are phonetically identical, or nearly so.[1] Here the evidence of our manuscript and of others similarly produced must obviously be regarded with caution.

[1] For example, H. N. Bate in *Journal of Theological Studies*, 36, 1935, pp. 76–7 has suggested that in Luke xxii. 40 the reading προσεύχεσθαι given by ℵDWΘN 13. 216 is not a mere phonetic error for the προσεύχεσθε of the remaining manuscripts, but a genuine variant. As, however, this passage falls within the part of the Sinaiticus written by A, whose ability to differentiate between ε and αι is far from reliable, the witness of ℵ at any rate cannot be claimed either for or against the supposition, and the question must be decided on non-palaeographical grounds.

VIII. DATE OF THE MANUSCRIPT

No new facts have come to light which modify to any material extent the general verdict of scholars regarding the date of the Sinaiticus, the arguments for which are well summarized by Lake (N.T., pp. ix–xv; O.T., pp. xii–xviii). The one objective criterion remains the presence of the Eusebian apparatus, which gives a rough *terminus post quem* of about A.D. 300–40. This argument has now been strengthened by the proof (pp. 36–7 above) that the apparatus was inserted by two of the scribes of the manuscript itself, and is therefore contemporary with the text. But a reliable *terminus ante quem* is still to seek. The most obvious objection to placing the manuscript later than the fourth century is the appearance of the writing, and this, the palaeographical argument, must always admit a certain latitude, since the test is so highly subjective and the steps in the development of the large uncial script characteristic of the Sinaiticus still very imperfectly fixed chronologically. We give here a list of approximately datable examples of this style of hand, which, being most familiarly exemplified by the early Biblical codices, goes by the name of 'Biblical uncial':

Terminus post quem

Datable examples of 'Biblical uncial'

1. Oxyrhynchus Papyrus 661 (now in Cairo; fragment of a roll with epodes of Callimachus), which bears on the back some cursive writing not later than *circ.* A.D. 200. The recto itself must therefore be at least several decades earlier.

2. Oxyrhynchus Papyrus 685 (= Bodl. Gr. class. f. 75 (P); fragment of roll of Homer, *Iliad* xvii), with some cursive writing of the late second century in the margin.

3. Rylands Papyrus 16 (fragment of a roll of New Comedy), the back of which has been utilized for a private letter dated A.D. 255–6. The recto is therefore not likely to be much, if at all, later than A.D. 200.

4. Oxyrhynchus Papyrus 1621 (= P. Lond. Inv. 2471; leaf of a vellum codex of Thucydides, collected speeches), to which some corrections have been made in a cursive hand of the early fourth century.

5. Beatty Papyrus IV (papyrus codex of Genesis), with a marginal addition in an early fourth-century hand (see F. G. Kenyon, *The Chester Beatty Biblical Papyri*, fasc. 1, pl. iv).

6. British Museum Oriental MS. 7594 (papyrus codex of Deuteronomy, Jonah, and Acts in the Sahidic Version), in which the blank space at the end of the text has been filled with a pious composition in Coptic, written in a cursive hand of Greek type dating apparently from the middle of the fourth century (E. A. W. Budge, *Coptic Biblical Texts in the Dialect of Upper Egypt*, 1912, pp. lv–lvii). The *terminus ante quem* of the text itself is therefore about A.D. 350. On the other hand, the binding, which appears to be original, was composed of documentary papyri (mostly municipal accounts) written *circ.* A.D. 320, and if we allow a sufficient lapse of time before these could become waste paper, the manuscript may be dated within narrow limits to *circ.* A.D. 330–350.

7. British Museum Oriental MS. 4927 (18) = Crum, *Catalogue of the Coptic Manuscripts in the British Museum*, 1905, no. 711; facsimile on pl. 11. A brief account of expenses, on papyrus, written in a rather rough Biblical uncial. The figures, in thousands of talents, and a possible equation (ll. 12–13) of 53 solidi with 37,448 talents,[1] make it possible to date the papyrus fairly closely to about the middle of the fourth century.

8. P. Ryl. Copt. 310, a fragmentary petition mentioning a debt of 170,000 talents and therefore to be dated in the second half of the fourth century (Crum, *Catalogue of the Coptic Manuscripts in the John Rylands Library*, 1909, pl. i).

Place of the Sinaiticus in the series

The Sinaiticus clearly postdates nos. 1–3, where the style is still developing out of the round upright uncial of the second century. On the other hand, it appears appreciably earlier than nos. 6–8; in the Sinaiticus the horizontal strokes of Τ and Γ are only lightly, if at all, thickened at the tips; the extremities of Ϲ and Ϲ are not completely rounded, but remain somewhat open and flat, as in nos. 1–3, and the tips again are only lightly emphasized. Particularly instructive is the form of upsilon, which in the Sinaiticus still shows the early shallow form ϒ, whereas in nos. 6–8, and even in nos. 4–5, it approximates to the deeply forked, heavily drawn Y of Hand II in the Alexandrinus. These considerations clearly suggest that the Sinaiticus was written before the middle of the century, a verdict which may be compared with Professor Hunt's

Probable date mid 4th cent.

[1] ϩⲟⲗⲟⲕⲟⲧⲓⲛⲁ ⲙⲛ ⲁⲩⲱ (ταλαντα) Ⳑⲍⲩⲙⲏ. Mr. Crum does not think an equation is intended, but even if this explanation be given up, the size of the sums mentioned shows that the date here suggested must be approximately correct.

opinion, quoted by Lake (O.T., p. xiii), that, but for the presence of the Eusebian apparatus, he should not have regarded the third century as an impossible date. It may be remarked, however, that the dangers of judging age on grounds of style are nowhere better illustrated than in the Sinaiticus itself, where the hands of scribes A and B present a markedly more archaic appearance than that of scribe D; did we not know that all three were contemporary, D might well have been judged half a century later than A and B.

Supported by cursive notes

Two further criteria, though not decisive, point in the same direction. Firstly, in the marginal additions made by scribe D[1] while correcting the New Testament the directional signs are frequently supplemented with the words ανω and κατω, the former being placed in the lower margin and the latter opposite the place in the text (N.T. 2^b, 66^b, 73, 74, 80, 82, 92). These words are written in cursive script (no doubt to distinguish them from the text proper), and slender though the evidence of a few isolated words must be, they certainly belong to the fourth century, and probably the first half of it (Fig. 12).

Importance of numerals

The second point is the forms of certain numerals used in the text of 1 Maccabees. In the course of the fourth century the old method of representing the figures 1,000–9,000 by the ordinary cardinal numbers for 1–9 with a surmounting curl or crest (e.g. $\overset{\frown}{\text{A}}$ = 1,000, $\overset{\frown}{\text{B}}$ = 2,000, etc.) gradually went out of fashion, the curl being replaced by a simple slanting stroke to the left of the

Two types

numeral (e.g. ʹA or ͵A = 1,000).[2] A cursory examination of dated fourth-century papyri gives the results shown opposite.[3]

Date of the transition

From these data it can be seen that the change from the old to the new system took place about the years A.D. 338–60. In the Sinaiticus we still find the earlier system, $\overset{\frown}{\text{B}}$ in O.T. 47, col. 1, and $\overset{\frown}{\text{F}}$ in O.T. 43, col. 1, and 47, col. 1. All these occur in 1 Maccabees; elsewhere thousands are written out in words, as regularly in the Vaticanus. We may reasonably assume that in 1 Maccabees at

[1] These are attributed by Tischendorf (Prolegomena, p. 9*) to the corrector B^a, but identity of ink and the fact that they accompany only corrections by D make it certain that they are from his hand. One isolated example of κατ(ω) by scribe A is on N.T. 40^b (Fig. 14).

[2] This latter system is found much earlier in inscriptions, from which it may have been taken over. The slanting stroke is a natural lapidary substitute for the curl.

[3] The apparent scarcity of examples after A.D. 350 is partly due to the increasing use of the gold solidus (νόμισμα) in reckoning instead of the old depreciated currency.

Old System

*P.S.I. 163 . . . A.D. 301–2
*P.S.I. 780, P. Strassb. 28 A.D. 305
*P.S.I. 310, *P. Thead. 10, *P. Thead. 38 . . A.D. 307
P. Berl. Leihg. . . A.D. 309
P.S.I. 820 . . . A.D. 314
*P. Thead. 29 . . A.D. 316
*P. Thead. 48 *circ.* A.D. 319–20
*P. Oxy. 60 . . . A.D. 323
P. Oxy. 1430 . . A.D. 324
P. Oxy. 1261 . . A.D. 325
*P.S.I. 309 . . . A.D. 327
*P. Thead. 43 . . A.D. 330
*Stud. Pal. xx. 96 *circ.* A.D. 330–5 (?)
*Stud. Pal. xx. 93 . A.D. 334 or 349
*P. Oxy. 85=P. Lond. 760 A.D. 338
*Stud. Pal. xx. 81 . *circ.* A.D. 338 (?)
*Stud. Pal. xx. 94 . A.D. 340 (?)
*Stud. Pal. xx. 75 . *circ.* A.D. 340 (?)
*B.G.U. 21 . . . A.D. 340
*P.S.I. 781 . . . A.D. 341
*Stud. Pal. xx. 95 . A.D. 340–1 (?)
*P. Gen. 48 . . . A.D. 346
*P. Gen. 63, 65 *circ.* A.D. 343–50
*B.M. Or. MS. 4927 (18) mid 4th cent.
P. Oxy. 1431 . . A.D. 352
P. Oxy. 1632 . . A.D. 353
*P.S.I. 1078 . . . A.D. 356
P. Oxy. 1056*, 1695 . A.D. 360
P. Oxy. 1048 . after A.D. 392

New System

*P. Lond. Inv. 2025 *circ.* A.D. 320 (?)[1]
*P. Lips. 97 . . . A.D. 338
*P. Flor. 71 . . *circ.* A.D. 350 (?)
*P. Lond. 1245 (iii, p. 228) A.D. 357
*P. Lond. 984 (iii, p. 237) late 4th cent.
*P. Oxy. 1052 . after A.D. 362
P. Flor. 75 . . . A.D. 380
*P. Oxy. 1041 . . A.D. 381
*P.S.I. 813 late 4th cent. (A.D. 382 ?)
*P. Oxy. 1753 = P. Lond. Inv. 2483 . . A.D. 390
*Stud. Pal. xx. 106 late 4th cent.
*P. Oxy. 1047 . ,, ,,
P. Oxy. 1280 . ,, ,,
*P. Oxy. 1223 very end of 4th cent.

Both Systems used together

*P. Lond. 1259 (iii, p. 239) *circ.* A.D. 320–40
P.S.I. 250 . . *circ.* A.D. 385

* An asterisk means either that the numeral has been verified on the original, or that there is reason to believe it correctly represented in the printed edition. Most printed editions of papyri, not excluding the Oxyrhynchus Papyri, are unreliable on this point. In general we have assumed, perhaps rashly, hand-lithographed editions to be accurate.

[1] From the binding of Or. MS. 7594, cf. above p. 61.

least these numbers were represented by numerals in the exemplar, since this alone can explain the erroneous τρισχιλίους δέκα for ὀκτακισχιλίους in 1 Macc. v. 34 (i.e. ͵Η for Η), and the extraordinary series of numerals in 1 Macc. v. 20 quoted above (p. 57). It might in consequence be argued that the shapes of the numerals in the exemplar had influenced the copyist of the Sinaiticus. But now that we have shown that the manuscript was written from dictation, this possibility is all but excluded, and we can have confidence in the validity of the scribe's own shapes as a criterion. If this is so, the Sinaiticus is not likely to be much later than about A.D. 360.[1]

Is the Sinaiticus much later than the Pamphilus MS.?

One argument against the commonly accepted date of the Sinaiticus may be mentioned in conclusion. It has been claimed[2] that since the writer of the notes at the end of 2 Esdras and Esther calls the copy corrected by Pamphilus and Antoninus παλαιότατον, he implies that the Sinaiticus itself was considerably less ancient; and that as the former must date from about A.D. 309 the Sinaiticus can hardly have been written much before A.D. 400. The flimsiness of this line of reasoning hardly merits refutation. Suffice it to point out that: (1) Pamphilus and Antoninus were famous martyrs whose relative antiquity would be familiar, whereas an anonymous production like the Sinaiticus would not invite a judgement from any but a trained palaeographer; (2) the Pamphilus and Antoninus manuscript may well have been written on papyrus,[3] and possibly in constant use, so that its appearance would rapidly

[1] The one fact which seems to discredit this criterion is the stichometry of the Codex Ambrosianus (cf. Ohly, *Stichometrische Untersuchungen*, pp. 81–2, and F. Zucker, *Gnomon*, 1932, p. 387). Unfortunately no facsimile or adequate description of this manuscript is available, and we have to rely on Ceriani's printed text with its excellent but all too brief preface (*Monumenta*, vol. iii, pp. vii–xxiii). From this description, however, it transpires clearly enough that the manuscript is rather later than the Sinaiticus and is rightly assigned to the 5th century; yet the stichometry in the margins uses the old system of denoting thousands. These figures, however, if the printed representations can be trusted, vary so much that we may doubt whether they really represent current practice and have not merely been copied in mechanically from a much earlier MS. It may be noted that the horizontal cross-stroke (e.g. $\overset{\alpha}{\bar{\Lambda}} = 1000$) is merely the line denoting a numeral drawn through instead of over the sign. For examples in papyri cf. e.g. Wessely, Stud. Pal. xxii. 75.

[2] *Bibliorum Sacrorum Codex Vaticanus*, ed. H. Fabiani and J. Cozza, tom. vi (Rome, 1881), Prolegomena, p. viii.

[3] This may explain why it contained only the books Kings–Esther; a papyrus codex could not comfortably contain more.

deteriorate, whereas the Sinaiticus, written on the more durable vellum, presents even now, after sixteen centuries, an appearance far from παλαιότατον to the untrained eye.[1] In any case, as Tischendorf himself points out,[2] this word as used by the annotator must not be interpreted by present-day standards of antiquity.

Dates of the correctors

As regards the correctors, the conclusions formed by Lake still hold the field. The A and B corrections we have shown to be contemporary with the manuscript, since they are attributable to the scribes of the text themselves. The C correctors have been assigned by some to the fifth, by others to the seventh century, and lack of comparative material enforces caution upon whosoever would decide between the two dates. The medieval D and E correctors are of slight importance.

[1] Tischendorf, *Appendix codicum celeberrimorum*, p. viii.
[2] *Codex Friderico-Augustanus*, p. 22.

IX. PROVENANCE OF THE MANUSCRIPT

LITTLE can be added to Lake's admirable survey of this important question (N.T., pp. ix–xv = O.T., pp. xii–xviii). The manuscript itself presents no direct evidence of its place of origin, and such inferences as can be drawn indirectly are dubious and often contradictory.

Remarkable affinity with the Vaticanus

Several of the arguments put forward in the past turn on the close connexion between the Sinaiticus and the Vaticanus. This consists not merely in textual affinity, but, if Tischendorf's assertion that scribe D of the Sinaiticus wrote the New Testament in the Vaticanus be accepted, in an actual physical link. It is true that Tischendorf's theory is universally discredited; but it will be shown below (pp. 89–90) that there exists an extraordinary similarity between scribe D of the Sinaiticus and the *other* scribe of the Vaticanus. Although the resemblance is not quite strong enough to prove identity, there can be no doubt that the scribal tradition is one and the same. Unfortunately we have no evidence to show how uniform the scribal tradition of the Graeco-Roman world was at this period, and until that is decided no amount of similarity can be used to decide origin.

Letter-shapes not specially Egyptian

To take Lake's points successively, the argument for an Egyptian provenance based on the shapes of certain letters, mu, xi, and omega, can hardly be accepted. The so-called 'Coptic' mu is now recognized as the cursive form common to the Graeco-Roman world, and the same is probably the case with the long-tailed xi; the fact that these are found in Egyptian papyri is irrelevant, since we have no comparable documents from outside Egypt. The exclusive connexion of the 'long omega' with Egypt has likewise been shown to be illusory (pp. 25–7).

Evidence of spelling indecisive

Lake's orthographical arguments are equally indecisive. The vulgar spelling κράβακτος for κράββατος peculiar to the Sinaiticus certainly recurs in a number of Egyptian papyri, but here again the lack of non-Egyptian material makes it valueless as a criterion. Its absence from other Biblical manuscripts counts for little, as few, if any, show so markedly the influence of colloquial pronunciation. The second peculiarity of spelling is the form Ἰσραηλίτης, said to be found only in the Sinaiticus, Vaticanus, the Old Latin

version, and certain papyri and other monuments from Egypt. Since a Western origin of the Sinaiticus and Vaticanus, though sponsored by Hort, cannot now be accepted, the facts might seem to indicate Egypt as the alternative; but in this case the falsity of the argument is demonstrable, since Ἰστραηλίτης is found in an inscription from Eastern Phrygia (W. M. Calder, *Monumenta Asiae Minoris Antiqua*, vol. i, 1928, no. 397), while Ἰστραήλ occurs in an inscription from the Lydian Philadelphia (H. Grégoire, *Recueil des inscriptions chrétiennes d'Asie Mineure*, i, 1922, no. 341 *ter*).[1]

Possible indications of local knowledge:

Discussion of Lake's remaining arguments lies outside the scope of this work, and they are in any case very indecisive. There is left, however, one line of approach which deserves to be followed up: Rendel Harris in a brilliant and stimulating paper 'On the Common Origin of Codices ℵ and B', printed as an appendix to his *Stichometry* (pp. 71–89), was the first to draw attention to a very curious scribal error in the Sinaiticus at Matt. xiii. 54, where the words εις την Αντιπατριδα take the place of the correct εις την πατριδα. Rendel Harris rightly held it inconceivable that this should be an unconscious reminiscence of Acts xxiii. 31, where (and nowhere else in the New Testament) Antipatris is mentioned; and he therefore referred the mistake to 'an aberration of a scribe's brain, as he sat writing in the neighbouring city of Cesarea' (ibid., p. 75).

Antipatris

This argument appears almost incontrovertible; scribes as careless and ignorant as those of the Sinaiticus might easily have perverted πατριδα into a meaningless jumble, or substituted another

[1] A stronger argument for Egypt might be sought in the spelling τετραάρχης found in the Sinaiticus every time the word occurs (Mt. xiv. 1, Lk. iii. 1 *ter*, Lk. iii. 19, Lk. ix. 7, Acts xiii. 1). The same spelling is found six times out of seven in C, which has the normal τετράρχης only in Acts xiii. 1, and once each in ZΔ (at Mt. xiv. 1) and Ξ (at Lk. ix. 7). But the main support comes from the Coptic versions, the Sahidic usually giving τετραάρχης, the Bohairic τετρεάρχης.

Another noteworthy spelling, apparently peculiar to the Sinaiticus among Biblical MSS., is the form πάθνη or πάθμη for φάτνη. The following spellings are found: φάτνη Is. i. 3, Hab. iii. 17, Prov. xiv. 4; φάτνωμα Zeph. ii. 14; πάθνη Joel i. 17; πάθμη Job vi. 5, xxxix. 9; πάτμωμα Song of Songs i. 17. The form πάθνη is comparatively well attested, occurring in Geoponica xv. 4, Moiris (ed. Pierson), p. 356, Eustathius 1259, 38 and 1784, 44, and in a papyrus letter of A.D. 98, P. Lips. 106, 9. πάτνωμα occurs in Hesychius. More singular are πάθμη and πάτμωμα, which are only paralleled in the name Παθμητικὸν στόμα given to the Phatnitic mouth of the Nile by Ptolemy (iv. 5) and Mela (i. 9, 9). B* has φατμωμα at Zeph. ii. 14.

word of approximately the same sound, but no one unconnected with Palestine would be likely to have produced Αντιπατριδα. Furthermore, there are other, though less striking, instances of the same process at work. In Acts viii. 5 the Sinaiticus substitutes Καισαρειας for the correct Σαμαρειας; there can be no question of a reminiscence of an earlier mention of Caesarea, for the first mention of the town is Acts viii. 40.[1]

Caesarea

On the other hand, it may be objected that a scribe writing at Caesarea, or indeed anywhere in Palestine, would be unlikely to commit such solecisms as Ιαμινιαν for Ιαμνια (1 Macc. iv. 15) or Ιππον for Ιοππην (1 Macc. xiv. 5). But these do not really prove anything more than a gross carelessness for which there is abundant evidence elsewhere; and it is arguable that the second instance actually supports our case, since Ἵππος is a well-known town on the south-west shore of the Lake of Galilee. In its literal sense ἵππον would be not merely nonsensical, but inexplicable, since there is nothing to suggest horses in the preceding text.[2]

Hippos (?)

Other 'Palestinian' traces

In *Revue biblique*, 35, 1926, pp. 92–3, Lagrange picks out some passages in the Sinaiticus which in his opinion suggest that it was copied at Caesarea from an Egyptian exemplar, a few readings based on Palestinian exegesis being introduced in the process.[3] As his first example he takes the reading Γεργεσηνων in Matt. viii. 28, Mark v. 1, Luke viii. 26, 37; but the argument does not hold, since in Matthew and Mark this form is due only to corrections by C^a, and thus provides no clue to the home of the manuscript, which in its original state divided its allegiance in the three Gospels between Γαζαρηνων, Γερασηνων, and Γεργεσηνων respectively. Moreover, in Luke viii. 37 the same C^a has corrected Γεργεσηνων to Γαδαρηνων,[4] and is in this respect at variance with Origenic tradition; only the still more recent C^{b2} reads Γεργεσηνων

[1] Caesarea Philippi is mentioned only in Matt. xvi. 13 and Mk. viii. 27.

[2] Of course the existence of a town Ἵππος does not prove that the reading in 1 Macc. xiv. 5 is more than a mere blunder; in fact, we find Ἰόππην misspelled Ιππην in Jonah i. 3; but this is probably just a scribal omission of a letter, a fault exceedingly common with B. The Codex Alexandrinus also once has Ιππην for Ἰόππην, at 2 Macc. iv. 21.

[3] B. H. Streeter (*Journal of Theological Studies*, 36, 1935, p. 180) has recently pointed out that when ℵ deserts B, it is very frequently in agreement with Origen and Fam. Θ. Cf. also R. V. G. Tasker, ibid. 38, 1937, p. 64.

[4] Clearly based on a solution which placed Γέργεσα in the περίχωρος of Γάδαρα; the only other case where Luke viii. 26 and 37 differ is in fam. 13, which has Γαδαρηνων and Γεργεσηνων respectively, reversing (absurdly) C^a's order.

throughout. The same objection applies to Βηθαραβα in John i. 28, for this is not the original reading, but a correction by C^{b2} of the original scribe's Βηθανια; and in any case the name advocated by Origen was not Βηθαραβα, but Βηθαβαρα.[1]

There remain the readings σταδιους εκατον εξηκοντα in Luke xxiv. 13, and Βηθζαθα in John v. 2; both were certainly sponsored by Eusebius, and both have their earliest and most illustrious witness in the Sinaiticus. But it appears hazardous to regard such readings as proof positive of Palestinian origin, especially as Βηθζαθα in a more or less garbled form is found in a number of Old Latin manuscripts.

The general effect of all these considerations, however, is to weaken very considerably the case for an Egyptian origin, and to suggest rather Caesarea, or at least Palestine, as the provenance. How far this can be reconciled with the presence of a non-Hexaplaric text in the Old Testament is another question. Certainly by the end of the fourth century the Hexaplaric Septuagint as edited by Pamphilus and Eusebius had practically swept the earlier text out of Palestine;[2] but we have no evidence that its victory was already so complete at the time the Sinaiticus was being written.

[1] On both these questions see the exhaustive article by R. G. Clapp, *A Study of the Place-names Gergesa and Bethabara*, *Journal of Biblical Literature*, 26, 1907, pp. 62–83; also F. C. Burkitt, *Gergesa—A Reply*, ibid., 27, 1908, pp. 128–33. It may be noted that Clapp's useful table on p. 68 omits C^a's correction to Γεργεσηνων in Mark, while in Matthew shifting of type leaves it uncertain whether Γεργεσηνων is the correction of C^a or C^b. The statement on pp. 66–7 respecting the corrections in the Sinaiticus is so confused that it will be useful to repeat the evidence in tabular form:

	Mt. viii. 28	Mk. v. 1	Lk. viii. 26	Lk. viii. 37
ℵ*	Γαζαρηνων	Γερασηνων	Γεργεσηνων	Γεργεσηνων
$\aleph^{ca}$	Γεργεσηνων	Γεργεσηνων	..	Γαδαρηνων
$\aleph^{cb2}$	..	..	..	Γεργεσηνων

[2] Swete, *Introduction*, pp. 76–8.

X. CONDITION, REPAIR, AND BINDING OF THE MANUSCRIPT

Importance of statistics

No exhaustive description[1] has yet been given of the material side of the Sinaiticus. From the standpoint of Biblical studies, the details which follow may at first sight appear superfluous, but in the present unsatisfactory state of Greek palaeography any scrap of evidence may eventually prove of use for determining the age, or still better, the provenance, of the book. If no conclusion can as yet be drawn from these statistics, the cause lies in the dearth of comparative material, for with the exception of the Freer group, no such information is available concerning other early Biblical manuscripts. And however inconclusive such a description may seem, it is nevertheless worth setting down as an historical record, since it displays the technique of the vellum codex, even at this early stage of its career, in so high a state of development that down to the present day no radical changes or improvements have been evolved.

1. NATURE OF THE MATERIAL

Nature and quality of vellum

The vellum,[2] according to experts who have examined it, is probably a mixture of sheepskin and goatskin, as in the Freer MSS., which are presumably of Egyptian origin. Any definite pronouncement is, however, made difficult by the scraping to which the skins have been subjected and which has frequently removed the characteristic markings. Tischendorf's oft-quoted surmise that the skins were those of antelopes rests on no foundation in fact, while uterine vellum is excluded by the great size of the sheets. There is no noticeable difference between the vellum of the Sinaiticus and the modern product, for methods of preparation have not changed materially,[3] except that in recent times machinery has been invented to split off for use as skiver leather the hair or 'grain'

[1] For a provisional account of the MS. and its binding see Douglas Cockerell in *The British Museum Quarterly*, x, 1936, pp. 180–2, with pl. LIII.

[2] The term vellum, properly calfskin, is here used generally of skins prepared for writing, whatever their ultimate origin. Cf. W. L. Ustick, 'Parchment' and 'Vellum', in *The Library*, xvii, 1936, pp. 439–43.

[3] Cf. the recipes quoted by D. V. Thompson, 'Medieval Parchment-making', in *The Library*, xvi, 1935, pp. 113–17.

side of sheepskin, which was formerly removed by laborious scraping and grinding. Even now, of course, a certain amount of scraping is still necessary, and in the case of true vellum, i.e. calfskin, which is not as a rule split, scraping remains the regular method of reduction.

2. STATE OF PRESERVATION

The vellum is generally in good condition, retaining its 'life' and toughness except where, as on some of the edges of the leaves, it has been wet. In those places it is brittle and liable to crack. On most of the edges there were numerous short slits, and the inner margins of many leaves were badly slit and damaged. Nearly all the inner margins had been contracted by the application of hot glue to the back in the course of successive bindings. A good many leaves were rather badly cockled all over, and some were locally contracted where spots of water appear to have fallen on them; where these spots fell on the writing, the ink has run. There are also a number of brown stains, perhaps due to drops of oil or grease from the lamps and candles of pious readers in the past. The occasional flaying-marks, i.e. accidental punctures in the skin, which develop into oval or circular holes in the process of manufacture, have as a rule been covered over with thin vellum shavings.

Causes of damage

3. DIMENSIONS

The vellum may be described as thin, sometimes excessively so in proportion to the size of the page. In the main, it varies between 0·003 and 0·006 in. in thickness. The thinnest leaf in the book, O.T. 57+62, has large areas under 0·002 in., down to a minimum of 0·0015 in. At the other end of the scale comes O.T. 204 with several patches over 0·012 in. thick. Different parts of the same leaf may vary quite considerably in thickness, e.g. from 0·003 to 0·008 in.

Thinness

The original size of the vellum sheets is unknown, as the edges have been much reduced in binding; it is certain that at least $\frac{1}{2}$ in. has been cropped off the fore-edge, and probably as much from the head and tail as well. Since in the latest binding the fore-edge was hacked roughly square after the spine had been crudely rounded, the leaves near the centre are now broader than those at the beginning and end; the breadth in fact varies from $13\frac{1}{4}$ to nearly 14 in., the height being fairly constant at about 15 in.

Original size

Present size

4. MAKE-UP OF QUIRES

Quaternions the rule

After the sheets, each destined to become a bifolium (i.e. two conjoint leaves) had been cut to size, a number (usually four, composing a quaternion) were laid one above the other, and the pile folded down the centre to form the quire. The quires never exceed eight leaves. Major divisions of the text always begin on a new quire, even if the preceding quire has not been completely filled. Leaves left blank in this way have been cut out in antiquity from quires 58, 78, and 80, which were originally all normal quaternions (cf. p. 13 and the Table, pp. 100, 107, 108). Occasionally, how-

Exceptions

ever, to obviate such waste of vellum, smaller quires have been used. Quire 41, for example, consists of four leaves only, ending exactly with the end of 1 Maccabees. Quire 90, of six leaves, was presumably judged sufficient for the ending of Revelation and the whole of Barnabas; when it proved inadequate, an extra quire (92) of two leaves only (cf. p. 13) was added to take the conclusion of the Epistle.

'Gregory's Law' followed

With two exceptions (cf. below pp. 75, 78) 'Gregory's Law'[1] is observed throughout, i.e. the sheets are arranged so that when folded (1) the first and last pages and the central opening of the quire display the flesh-side of the vellum, and (2) in successive openings hair-side faces hair-side, and flesh-side flesh-side.

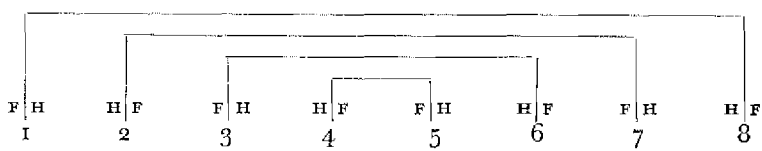


FIG. 20. ARRANGEMENT OF NORMAL QUIRE.
F = Flesh-side.
H = Hair-side.

Logical basis of the Law

The reasons behind the second part of Gregory's Law are clear enough, for if it were disregarded the book would present a most motley appearance, so marked is the difference in colour and texture between the hair-side and flesh-side. The same matching is normally carried out in papyrus codices, the sheets being so

[1] C. R. Gregory, *Canon and Text of the New Testament*, 1907, p. 324. E. K. Rand, *A Survey of the MSS. of Tours*, i, 1929, p. 12, wrongly restricts Gregory's rule to the confrontation of similar sides (his own 'Rule I'), giving as 'Rule II' the arrangement of the quire with hair-side outwards—a practice characteristic of Latin, but not of Greek MSS.

arranged that horizontal fibres face horizontal fibres (the 'recto' or writing side of the material, corresponding to the flesh-side of the vellum) and consequently vertical fibres face vertical fibres.[1] The flesh-side was perhaps preferred for beginning a quire simply because it is the 'right' side, superior in whiteness, smoothness, and writing qualities to the hair side; partly also, it may be, because vellum always tends to curl towards the hair-side, so that if the exterior leaves are arranged with flesh-side outwards and hair-side inwards, they press towards each other and keep the whole quire flat and manageable. Preference in the Western world for arranging the quire with hair-side outwards may be based on its greater toughness and durability; in the Sinaiticus the exposed flesh-sides, at much-handled openings, such as the beginning of Isaiah or the New Testament, are now in a deplorable state.

Preliminary fastening of quire

After the quire had been made up, it was apparently fastened together for the pricking and ruling. In the earlier part of the book, about 1–1½ in. at head and tail of the quire was whipped over with crossing stitches of narrow vellum strips (Fig. 22); in subsequent quires the fold in the three outer bifolia was slit at head and tail for a distance of 1–2 ins.,and thick glue run in. Towards the end, e.g. in quire 36, there are groups of four pin-holes in line, about ⅛ in. apart and quite close to the fold, at the head and in the centre; these may have been caused by overcasting with fine thread.

Such a temporary fastening together of the quire appears to be unparalleled; it was perhaps necessitated by the peculiar method of ruling across quire openings instead of across bifolia before folding (cf. p. 75). With vellum as thin and liable to curl as that of the Sinaiticus, it was imperative to secure the sheets in some way to prevent them shifting under the pressure of the stylus. But even so the overcasting must have been rather a doubtful advantage, as it would make it difficult to spread the leaves out flat for ruling.

5. PRICKING

Where pricked

The next stage was to mark the quire for ruling. This was done by folding it down the centre and piercing with an awl right

[1] Kenyon, *Books and Readers in Ancient Greece and Rome*, 1932, pp. 104–6. His suggestion that the confrontation of similar sides in vellum codices is accidental, being the natural result of folding and refolding a large skin, seems less probable.

through the eight thicknesses of vellum. Pricks (cf. Fig. 21) were made (1) in the upper and lower margins, to guide the vertical bounding-lines of the columns of writing, (2) down the right side about two or three inches from the fore-edge,[1] to guide the horizontal ruled lines on which the writing stands, and (3) occasionally only, in the centre of the upper margin, to guide short lines ruled for the running titles.

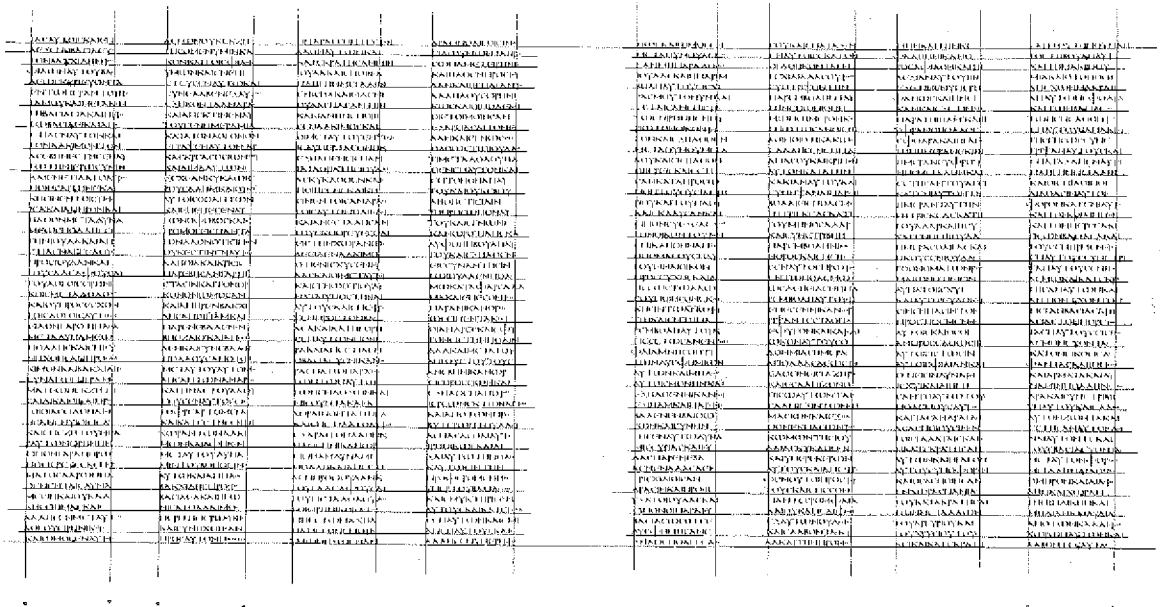
The intervals between the pricks down the fore-edge, and consequently the rulings they serve to guide, vary greatly in size; sometimes they are intended for one line of writing only, sometimes for two, three, or even four lines. There is also considerable variety in the unit of spacing, so that intervals meant to hold the same number of lines of writing are not necessarily of the same size. Yet the total height of the ruled space remains remarkably constant.

Probable method

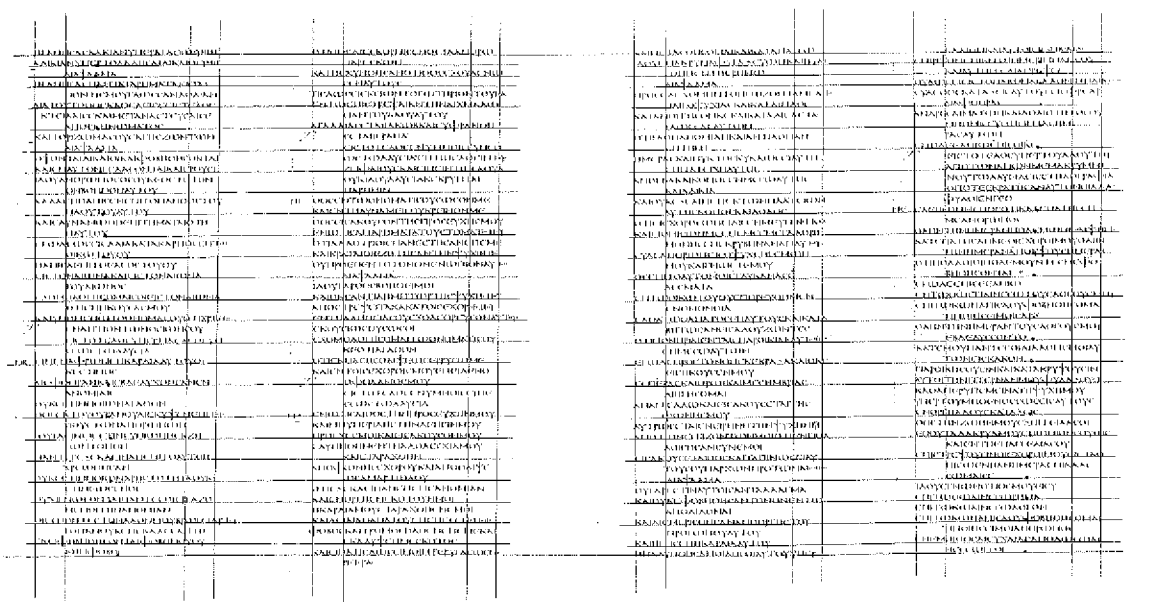
Such irregularities could not have occurred in the course of setting out these pricks with compasses, and the most probable explanation seems to be that a cylindrical[2] ruler with forty-eight equally-spaced marks was employed, and that a hole was pricked roughly opposite every mark, every other mark, or every third or fourth mark, according to the whim of the moment. Thus in spite of irregularities of spacing the ultimate size of the column remains unchanged. The prickings for the bounding-lines placed in the upper and lower margins are often so near the edge that they have been cut off in binding; they are fairly regularly spaced throughout the book, but there is not enough evidence to show how they were set out. In contrast to the rest of the manuscript, the Poetical books of the Old Testament are pricked and ruled for two columns to the page, each column having in addition an indented line, about an inch from its left edge, for the rubrics and the over-runs where the verse does not end with the line (cf. Fig. 22). A similar line is drawn about an inch from the right edge of the column, to mark the indents for the reverse side of the page. It is worthy of note that two of the quires prepared in this way (64 and 68) were at first wrongly pricked for four columns.

[1] And thus standing within the text, as is usual in early Greek and Latin MSS. Cf. E. A. Lowe, *Codices Latini Antiquiores*, ii, 1935, p. vi. The last prick is doubled.

[2] This shape would give most scope for irregularities in spacing. A flat ruler, even of the crudest design, could hardly permit of such variations.



Prose books



Poetical books

SPECIMEN ARRANGEMENTS OF PRICKING AND RULING

6. RULING

Ruling across openings after folding

This was done with a hard point, normally on the flesh-side of the vellum, the line thus appearing as a raised ridge on the reverse or hair-side. After pricking, the quire was spread out flat, with the outermost bifolium on top, showing the flesh-side; this was then ruled, first with the vertical bounding lines of the columns, then horizontally right across the double sheet from one set of pricks to the other (Fig. 22). The quire was now folded up, and each successive opening which showed the flesh-side was similarly ruled across. Thus if we number the pages of the quire 1 to 16, pages 1+16, 4+5, 8+9, 12+13, are ruled together in pairs.

This method of ruling, though found in some other early manuscripts, is very unusual, and the ruling of non-conjugate leaves must have been a delicate matter in spite of the precautions taken to keep the quire together. It had one advantage, however, in that the flesh-side openings, where the ruling was heaviest and most prominent, showed complete correspondence between the text-lines of the two facing pages.

Exceptions prove the rule

Apparent exceptions to the above scheme can usually be traced to some special circumstance; for example, it is hardly necessary to point out that the cancel-leaves in the New Testament differ in pricking and ruling from the rest of the quire. The outermost bifolium of quire 40 is likewise from an alien source, though no change of hand is involved, and there is no reason to regard it as a cancel-leaf. Quire 90 (cf. p. 78, note 11) is irregular in make-up, as flesh- and hair-sides were not matched; the bifolia were ruled separately before folding so that the ruling might be on the flesh side throughout. Throughout the book no attempt was made to rule more than one thickness at a time, although with such thin vellum it would have been quite practicable, there being in fact numerous instances of secondary impressions, where the ruling has unintentionally penetrated to the next sheet or sheets.

7. STATISTICS OF PRICKING AND RULING

The following Table shows the intervals between the pricks (represented by dots) and between the ruled lines, counting from the top of the page downwards. The number of pricks or lines is of course always one more than the number of intervals between

them; thus .1.1.1. means that a page begins with four pricks, each separated from the next by a single unit of spacing destined to hold one line of writing. Repetition of similar spacings is marked by a raised figure thus: $.2^{23}.$, meaning a double-spaced interval repeated 23 times. The specimen pages in Fig. 21 are pricked and ruled $.1.1.2^{22}.1$ and $.1.1.1.2^{14}.3.2^{6}.1.$ respectively.

A normal page has 47 intervals, i.e. 48 pricks and ruled lines, and consequently 48 lines of writing. The writing always stands above the ruled line, where there is one; in the case of double- of multiple-spaced intervals, the position of the intermediate lines was judged by eye.

The later quire-numeration (cf. p. 7) is used in these tables.

Raised figures after a quire number denote the place of a leaf in the quire, e.g. 38^{5} means the fifth leaf of quire 38.

QUIRES	HOW PRICKED	HOW RULED	WHETHER PRICKED FOR RUNNING TITLE	WHETHER RULED FOR RUNNING TITLE
$1–34^{7}$	Lost			
34^{8}	$.1.2^{23}.$	As pricked	No	No
$35–37^{3}$	At Leipzig			
$37^{4–8}$	$.1.2^{23}.$	As pricked (apparently)	No	No
38	$.1.1.2.^{22}1.$	As pricked	No	No
39	$.1.1.2^{22}.1.$	$39^{1–3, 8}$: as pricked	No	No
		$39^{4–5}$: $.1.2^{22}.1.$ (see *note 1*)	No	No
		$39^{6–7}$: $.2^{23}.1.$ (see *note 2*)	No	No
$40^{1, 8}$ (see *note 3*)	40^{1}: $.1.2^{23}.$ 40^{8}: $.1^{47}.$	$.1.2^{23}.$	No	No
$40^{2–7}$	$.1.1.2^{22}.1.$	As pricked	No	No
41	$.1.2^{23}.$ (see *note 4*).	As pricked	No	No
42 (see *note 5*)	$42^{1–3\ 6–8}$: $.1.1.2^{22}.1.$ $42^{4–5}$: $.1.1.1.2^{22}.1.1.$	$42^{1–3, 8}$: as pricked $42^{6–7}$: $.2^{23}.1.$ As pricked	No	No

Note 1. Overlooking the topmost prick, which is very indistinct.

Note 2. Utilizing the topmost prick, but disregarding the one below.

Note 3. Not from the same source as the rest of the quire, the pricks for the bounding-lines being different.

Note 4. There is a similar abortive pricking too high up in the page.

Note 5. On reaching 42^{3} verso the scribe decided that he must write more to the page

QUIRES	HOW PRICKED	HOW RULED	WHETHER PRICKED FOR RUNNING TITLE	WHETHER RULED FOR RUNNING TITLE
43–46	.I^{47}.	As pricked; on 43^{2} the bottom line was not written, by error.	Yes	Yes; 46 also ruled across central prickings for bounding lines.
47–56	Lost			
57–59	.I.2^{23}.	As pricked	57: Yes 58–9: No	No
60	.I.I.I.2^{14}.3.2^{6}.I.	As pricked	No	No
61-67	.I.2^{23}.	As pricked	63: Yes 61–2, 64–7: No	No
68	.I.I.2^{22}.I.	As pricked	No	No
69	.2^{23}.I.	As pricked; on 69^{7} recto headings are written above the top line of text, giving 49 lines in all.	No	No
70 (see *note 6*)	.I.2^{23}.	As pricked, with exceptions.	Yes	No
71	.I.2^{23}.	As pricked	Yes	Yes
72	.I.2^{23}.	As pricked	No	No
73	.I^{47}.	As pricked	Yes	No
74$^{1, 4–6, 8}$	.2^{22}.I.I.	As pricked	Yes	No
74$^{2, 7}$ (see *note 3*)	.I.I.I.I.2^{21}.I.	As pricked	No	No
75	.I^{47}.	As pricked	Yes	Yes
76$^{1–3, 6–8}$	.I^{47}.	As pricked	No	No
76$^{4, 5}$ (see *note 7*)	.I.I.2^{4}.3.2^{16}.I.I.	As pricked		
77	.I^{47}.	77$^{1–3, 8}$: .4^{11}.3. 77$^{4–7}$: .I.4^{11}.2.	Yes	No

in order to keep 1 Maccabees within the limits of a single quire. Extra lines were ruled at top and bottom (thus, exceptionally, on the hair-side), giving 50 lines of writing. The rest of the quire was pricked afresh for 50 lines, and was so ruled until 42^{6}, where the earlier (normal) pricking was reverted to.

Note 6. This quire was pricked too low down in the page, and various attempts were made to set matters right by writing an extra line at the top, ignoring the bottom writing-space, &c. The ruling and writing is very irregular, and confusion is increased by secondary impressions. In the end, 70$^{2–3}$ and 70^{7} recto col. 1 only received 47 lines of text, while 70^{6} verso col. 2 has 49 lines. The rest have the usual 48.

Note 7. Cancel-leaves written by scribe D.

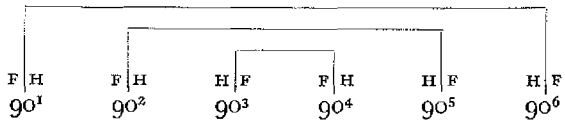
QUIRES	HOW PRICKED	HOW RULED	WHETHER PRICKED FOR RUNNING TITLE	WHETHER RULED FOR RUNNING TITLE
78	.1.1.1.2^{22}.	$7^{8^{1-3,[8^1]}}$: .2.3.4^{10}.2. $7^{8^{4-7}}$: .1.2.4^{11}.	Yes	No
79	.1.2^{23}.	As pricked	No	No
80	.1^{47}.	$8^{0^{1,[8^7]}}$: .1.1.2^{22}.1. $8^{0^{2,3,6,[7^2]}}$: .4^{11}.3. $8^{0^{4,5}}$: .4^{11}.2.1.	Yes	No
81	.1^{47}.	As pricked (see *note 8*)	No	No
82	.1^{47}.	As pricked	Yes	No
83	.1.2^{11}.1.2^{11}.1.	As pricked	No	No
$8^{4^{1,2,4,5,7,8}}$	.1.2^{23}.	As pricked	Yes (?)	No
$8^{4^{3,6}}$ (see *note 9*)	.1.2^{22}.1.1.	As pricked	No	No
85	.1.1.1.2^{9}.1.2.1.2^{11}.	As pricked	Yes	Yes
86	.1.2^{23}.	As pricked	No	Yes (on centre pricks for column margins).
87	.1.1.1.2^{22}.	As pricked	Yes	Yes
88	.1^{47}. (see *note 10*)	See *note 10*	Yes	Yes
89	.1.1.1.2^{22}.	As pricked	Yes	Yes
90	.1.2^{23}.	As pricked (see *note 11*)	No	No
91	.1.1.2^{22}.1.	.2^{23}.1.	No	No
92	.1.2^{23}.	As pricked	No	No

Note 8. 8^{1-5}, the central bifolium, was reversed by error in making up the quire, and the ruling is consequently on the *hair* side. This supports the evidence (cf. p. 73 above) that the quire was fixed before ruling and writing, otherwise we may presume the bifolium would have been turned over.

Note 9. Cancel leaves written by scribe D.

Note 10. The original pricking was made too low down in the page, consequently two extra pricks were added at the top, and the second prick from the foot doubled to mark the end of the column. The inner sheets of the quire got askew while these additional pricks were being made, so that they came too near the original ones to allow for the intended number of lines. $8^{8^{4-7}}$ are ruled for, and received, 47 lines of writing only.

Note 11. Quire 90 is made up as follows:



It will be seen that this quire of six leaves obeys the first provision of 'Gregory's Law' at the expense of the second. Each bifolium is ruled separately.

8. POUNCING

Writing area pounced

To give the writing a hold on the vellum it was necessary to remove as far as possible the glossy, greasy surface common to all newly prepared skins. This was done by roughing with an abrasive the area intended for writing. Medieval[1] and modern[2] scribes have advocated a variety of substances—powdered pumice, powdered cuttle-fish bone, sandarac, chalk, whiting, &c., or combinations of these, but it is of course impossible to say what was used on the Sinaiticus; the harsh scouring of some of the pages suggests fine sand.

Pouncing by the scribe

That the pouncing was done by the scribe himself as he went along can be inferred from the changes in its appearance, notably between the pages written by A and those written by D; scribe A rubbed the powder up and down the page, making a curious swerve in the upper margin; D worked more carefully, keeping his lines strictly perpendicular, while there are often traces of a further pouncing at right angles (i.e. horizontally). Scribe B's practice presents no marked characteristics.

It would be expected that the scribe would pounce a whole quire at a time, but this is clearly not the case, since where a book, such as 4 Maccabees or Psalms, is divided between two scribes, the appearance of the pouncing changes simultaneously with the hand, even if this occurs in the middle of a quire.

Pouncing in the margins

Besides the text area, small patches were often pounced in the upper margins for the running titles, and the margins were often pounced to receive corrections, not only by the earliest correctors, but C^a as well.

9. INK

Ink an iron compound

Little can be said of the nature of the ink, as analysis cannot be carried out without damage to the manuscript. It is, however, certain from the way in which the vellum has been eaten away in many places[3] that the ink was in the main an iron compound, and not the old carbon-and-gum ink which is found almost universally

[1] Cf. D. V. Thompson, op. cit.

[2] Cf. Edward Johnson, *Writing and Illuminated Lettering*, 1908, p. 174; Graily Hewitt, *Lettering*, 1930, pp. 270–2.

[3] The destruction of the vellum is not due to the ink itself, but to sulphuric acid liberated by chemical changes in it.

on papyri. So far as the evidence goes at present, it seems clear that this chemical ink came into use with the adoption of vellum as a writing material; a carbon ink would not stick to the surface of the vellum, whereas a chemical ink held, often only too well. The difference between the two can be clearly seen in a microscope, under which chemical ink appears as a stain, causing a kind of granulated effect on the vellum, whereas a carbon ink appears as a mass of individual specks of carbon resting on the surface. In the Sinaiticus, the ink, though mainly a chemical compound, must have contained a certain amount of carbon, as offsets are frequent, and the ink has run where damp has reached it.

Colour The colour of the ink varies a good deal, from a warm yellow-brown to nearly black, though it never shows the jet-black of pure carbon inks. A good deal of the variation may be due simply to the amount of ink on the pen, or to differences in the quality of the vellum, but in some of the coronis designs in the New Testament, and in the superscriptions, running titles, and enumeration of στίχοι in A's very small hand (cf. pp. 32, 39), the ink seems to have been deliberately thinned to give a difference of shade.

The inks used by all three scribes yield the same range of shades, and colour cannot be used to identify the writers. It was clearly a matter of chance whether, when a scribe replenished his supply of

Changes of colour ink, the shade matched; a good instance of a change of this kind is provided by the Prophetic books of the Old Testament, the early part of which is written in a much darker ink; the exact place where the change takes place is O.T. 80^{b}, col. 3.

10. QUIRE SIGNATURES

Not inserted by the scribes These have already been fully discussed above, pp. 7–8, where it is stated that none of them can be assigned to any of the three text hands. This is natural enough, for, with three scribes working more or less simultaneously and not knowing exactly how much space the text allotted to them would occupy (cf. p. 72), only the scribe of the opening section could have attempted to

Parallel of Alexandrinus number his quires. We may compare the Codex Alexandrinus, where the first hand, at the beginning of each quire written by him, drew an ornamental frame to contain the quire number, but inserted the numeral only in the first run of quires. The vacancies he left were filled by a later hand.

11. MARKERS

Original tie-on labels

Two attempts have been made to equip the manuscript with some means of easy reference. In many cases, and perhaps originally in all (though cropping of the edges makes it impossible to determine this) the first leaf of each book shows a pin-hole, usually about ¼ in. from the present fore-edge and at a distance varying from about three to ten inches from the top of the page. In three of these holes, at the beginning of 1 Maccabees, Isaiah, and Habakkuk respectively, there still remains a loop of thread, to which presumably a label was formerly attached, giving the name of the book. Holes without threads can be seen at Judith, Zechariah, Malachi, Psalms, Job, Matthew, and Acts. The position is varied up and down the page so that the labels should not obscure one another. Rectangular leather tabs also were glued to the pages, but these have now likewise disappeared, leaving traces at Jeremiah, Psalms, Proverbs, Ecclesiastes, Song of Songs, Job, Mark, Romans, James; to judge from the crude way in which they were affixed, they would seem to be later than the loops of thread, which they were perhaps intended to replace.

Leather markers

12. PARTIAL DESTRUCTION OF THE MANUSCRIPT

MS. neglected after 12th century

Little fresh evidence for the external history of the manuscript has come to light. The latest desultory scribblings to which any approximate date can be assigned seem to belong to the twelfth century; its complete neglect after that date is not surprising, as the manuscript could be deciphered only with difficulty by a reader accustomed to minuscule script with accents, breathings, and other lectional aids. The state of the last few extant leaves of Hermas, which are worn, dirty, and dishevelled, shows that the manuscript existed for some time without covers, but even so only a score of leaves have actually disappeared here (cf. p. 17), and if the beginning was in no worse state it must still have been substantially complete. The dissolution of the manuscript was accelerated by the use of odd leaves for binding; these seem to have been pulled out at random, for the Genesis fragments certainly came from f. 11 of the original manuscript, the Numbers from somewhere about ff. 72–4, while the Judith fragment comes from the middle of a well-preserved part. Subsequently the volume seems to have

Leaves torn out for binding

become separated into two parts, Psalms to Hermas being hidden away or forgotten, while what remained of the rest of the Old Testament was eventually put out for burning. Probably much of this had already been consumed before Tischendorf arrived on the scene, for the first leaf now extant shows no signs of dirt or wear and is in practically as good condition as the succeeding leaves. The seven missing quires in the Prophetic books doubtless shared the same fate.

Most of O.T. deliberately burnt.

What Tischendorf saw in 1844

Tischendorf, it will be remembered, secured only 43 leaves from the contents of the basket, and these he described as 'about one third of the whole'; later, he gave the total number as 129, but this looks more like 43×3 than an authentic figure. It must, however, have been singularly near the truth; for up to the end of the Prophetic books just 130 complete leaves are now extant. That these were the very leaves seen by Tischendorf is all but certain since (1) we know that they included Isaiah lxvi. 12—Jeremiah i. 7, copied on the spot by Tischendorf,[1] though he was not permitted to carry off the original; (2) the break between Prophets and Psalms falls naturally in the manuscript; (3) had Tischendorf caught even a glimpse of the Poetical books, the two-column arrangement would surely have struck him. Thus, we know exactly what Tischendorf saw in May 1844, and can rest assured that after his visit no further destruction took place.

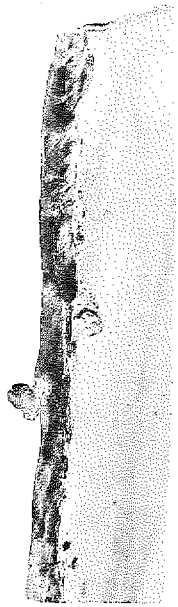
13. EARLIER BINDINGS

Traces of original binding

Later repairs

There is conclusive evidence of at least two bindings. The first and probably the original binding was sewn by single threads of loosely twisted hemp. Only a few fragments of this have survived and there is not enough evidence to show how the leaves were sewn. At some time this first sewing failed to hold the leaves, and many became detached and were damaged at both the inner and outer edges. Subsequently these torn leaves were somewhat roughly whipped with thin double thread of hemp (see Fig. 22), not always in the proper gatherings. The original glue was not removed from the backs of the quires, and some fragments of the single thread of the earlier sewing were left under the overcasting. Before the loose leaves were overcast the inner edges of some were trimmed, reducing the inner margins by about a quarter to half

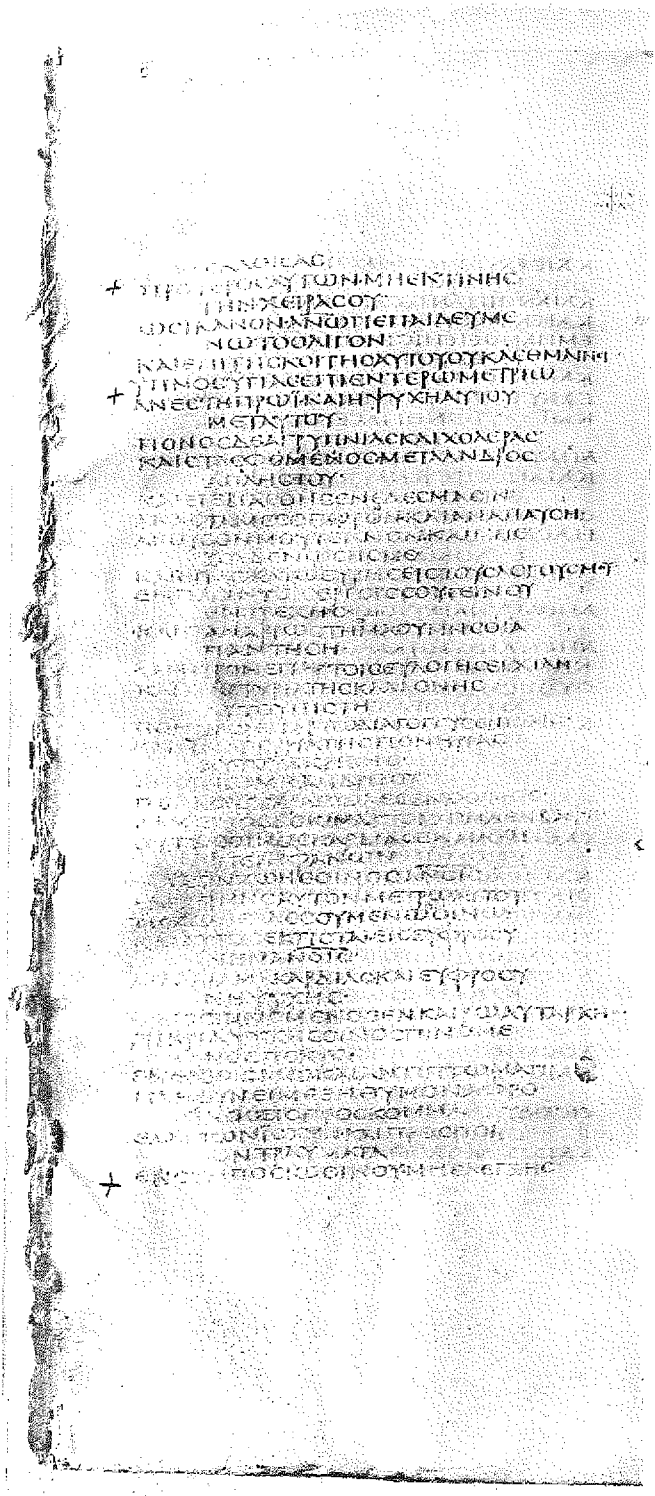
[1] But not published by him till 1855 (*Monumenta Sacra Inedita, Nova Collectio*, i).



Vellum overcasting
Quire 38

Loop of thread for label (Isaiah) *O.T. 64*

Remains of leather tab (Mark) *N.T. 18*



Quire before rebinding, with thread overcasting and loops showing position of bands *Quire 70 = O.T. 222*

an inch; in the case of N.T. 109, $\frac{5}{16}$ in. of the inner margin has been turned up, and N.T. 118 has its inner margin turned up and stuck to 119. The innermost pair of leaves in many of the quires were separated by a clean cut; no obvious reason for this can be offered.

Sewing of later binding

The quires in the later binding were sewn with thick double hempen threads, some of which were twisted together and some straight. This thread is indistinguishable in texture from the remaining fragments of the earlier single-thread sewing. Some fragments from a lightly twisted flax thread were also found, in one case knotted to the hempen thread of the later sewing. The double-thread sewing was stitched round four very irregularly spaced bands, the loops still remaining on the thread in quire 70 (Fig. 22), and the marks of the bands showing clearly on the spine. In Fig. 1 both the loops of thread and the marks of the bands can be plainly seen. The loops would indicate that at the second sewing the book must have had prominent raised bands on the spine, which suggests a fairly late date.

Later binding crude and incompetent

The swelling caused by the overcasting and the very thick double thread must have made a floppy volume with an unmanageable shapeless spine. This is confirmed by the photographs of the book before binding (Fig. 1). The edges of the leaves were roughly trimmed after sewing, the badly shaped back accounting in part for the irregularity of the trimming. In the photograph of the tail edge it will be seen that while the fore-edge is roughly square, the spine is badly out of shape. When the spine is straightened up, as in the new binding, the fore-edge naturally becomes irregular. It is quite possible that this later binding was never actually completed. The sewing threads were deliberately cut from the bands, perhaps with a view to a new start. If the binder had got as far as attaching the boards, we should expect some trace of a joint, but, as the illustrations prove, nothing of the kind can now be detected. That the Codex was bound in one volume is shown from the fore-edge trimming; the general irregularity, although much emphasized towards the end, persists throughout.

14. THE NEW BINDING

The first stage in rebinding the manuscript was to examine it leaf by leaf, and take notes of the necessary repairs. Next, some specially thin vellum for mending was procured; this was in vary-

ing natural shades and had a buffed under-surface to aid the stick-

Mending the leaves

ing. The very numerous slits in the edges of the leaves were treated first, the mending patches being pared thin round the edge and roughened underneath by scraping. The vellum of the Codex was also slightly roughened under the mend with fine sand-paper or cuttlefish bone. The adhesive used was a paste made of corn-flour one part, water one part, size made from seaweed (carrageen moss) three parts. The excellence of the vellum used for repairs made the immense number of patches unobtrusive. Where there were holes or dangerously weak places, or tears within the text area, these were strengthened with thin silk gauze which is nearly invisible when laid down. No attempt was made to strengthen the weak places in the text due to ink corrosion, except where these appeared to be in danger of breaking down.

Removing remains of earlier bindings

Much trouble was experienced in chipping the extremely hard glue from the backs of the quires, there being an inner layer which had survived from the first binding below a much thicker layer due to the later binding. There seemed to be no appreciable

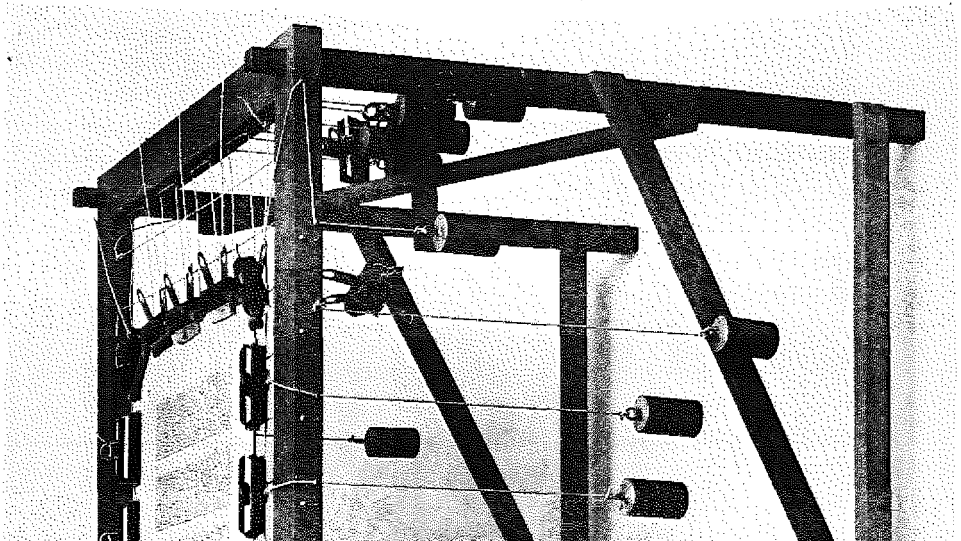
Vellum guards for detached leaves

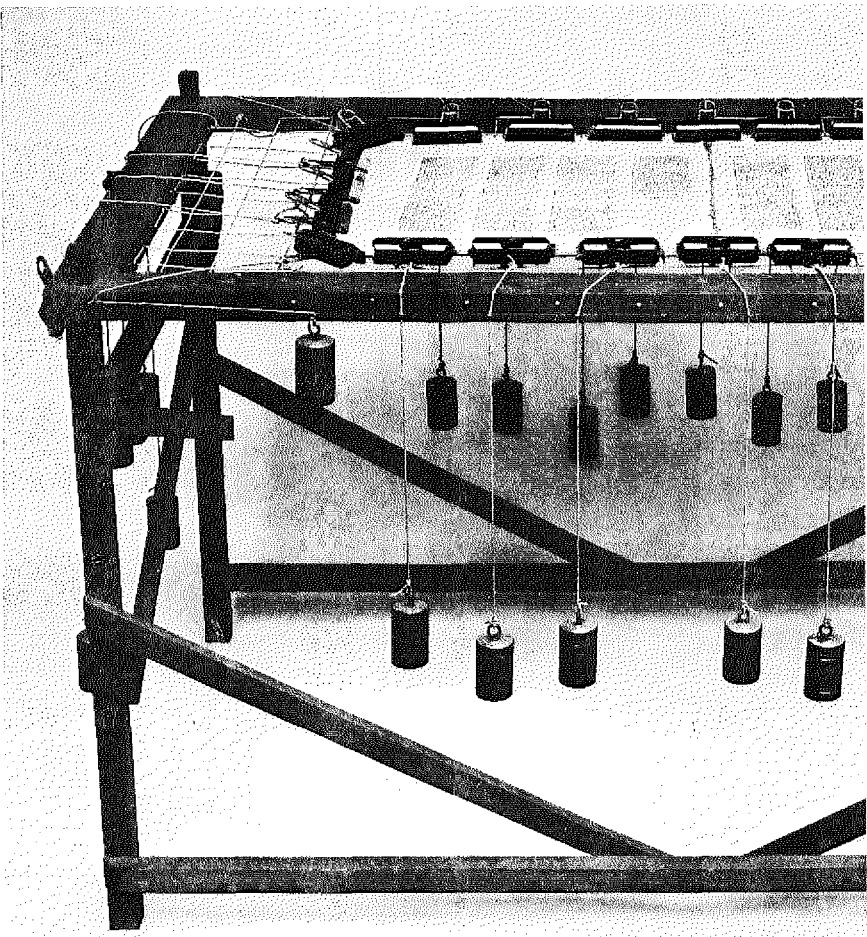
difference in the nature of the two glues. When the glue had been removed and the overcasting cut away, most of the leaves were found to be detached, or so insecurely joined as to make guarding necessary. Guards of fine linen, made without chemicals and sun-bleached to the exact shade of the Codex vellum, were used. These adhere more securely than vellum guards, although the adhesion of anything to a vellum surface must always be a little uncertain.

Leaves damped and flattened by stretching

When individual leaves were mended—and often more than a day was spent on mending one leaf—they were put between wooden frames having crossed strings stretched across them. The two frames were placed on a damp cloth, a second damp cloth placed over them, and the whole covered by a piece of waterproof sheeting. In this way the vellum leaves were subjected to a damp atmosphere without actually coming in contact with the damp cloths. After about an hour, or an hour and a half, the leaves became quite soft and limp and could be straightened out on the stretching-frames (Fig. 23). They were then left to dry in the frames, still under tension, and in a few hours could be removed and placed in the press without any danger of set-off. By this process the leaves were flattened, and although they became slightly uneven afterwards, they remain reasonably flat. Now that

FIGURE 23





STRETCHING-FRAME

the cockling has been eliminated the leaves show a marked tendency to curl towards the hair side, but this is a property common to all thin vellum, old or new.

Technique of applying guards

The guarding was done with the help of a specially designed frame, which allowed a linen guard to be stretched and held while it was thoroughly pasted, and the pasted guard to be held while the back edges of the vellum sheets were carefully applied to it. When the vellum leaves were in position on the pasted guard a strip of celluloid was laid on them, and above that a strip of wood lined with indiarubber. The frame with the guarded leaves was then put in the press and left for a few minutes. After pressing, the linen guard was cut off at the head and tail, and the leaves folded. As there is a tendency for freshly guarded vellum to contract a little in drying, the guarded and folded leaves were put in the stretching-frame and allowed to dry with a slight stretching strain in the direction of the length of the guard.

Quires thrown out in new binding

One requirement was that every part of the leaf should remain available for examination. As the adding of some three hundred odd thicknesses of even very fine linen at the folds was bound to cause a considerable amount of swelling, and as, moreover, it was highly undesirable that hot glue should come in contact with the thin vellum of the Codex it was decided to throw out the quires.

The procedure adopted was the following. One thickness of parchment, two thicknesses of hand-made paper and a strip of the guarding linen were sewn on to the back of each section by continuous stitches going up and down the centre. As this method throws an unusual amount of strain on the unsupported sewing, unbleached thread of exceptional strength, free from chemical treatment, was used, at the risk of increasing to some extent the already considerable swelling caused by the guards. To provide against the possibility of a chance break in the sewing causing the section to come loose, the threads at the inside of the stub were glued between the folded strip of linen. Thus, to detach a section every one of the twelve or thirteen stitches would have to be cut separately. When the stubs were sewn on, the two sides were turned back and subsequently returned on themselves, and cut off just short of the fold of the section. The aim was to make this turned-up stub exactly the thickness of the linen-guarded portion of the section to which it was sewn.

Sewing on to bands The stout cord on to which the stubs were sewn was hemp, with long silky fibres when untwisted, and the sewing was by a figure-of-eight stitch over six double bands. Very stout thread was used. The headbands were worked over single cords with yellow purse-twist and stand out on the spine like the other bands, which are sewn on twin cords. Wide leather joints were sewn on with the fly-leaves.

Fly-leaves The fly-leaves at either end consist of one leaf of grained vellum and two leaves of plain, slightly stained vellum.

Plain oak boards for sides It was decided that the Codex should be bound in two volumes in a style which, while having some dignity, should neither aim at reproducing an imaginary original nor be markedly modern in spirit. Plain oak boards with white morocco backs were eventually chosen; the boards presented some difficulty, as unsupported oak of the dimensions required (height 15 in.; width $14\frac{1}{4}$ in.; thickness $\frac{3}{8}$ in.) is apt to warp. Some thirteen or fourteen boards of thoroughly seasoned wood were prepared, and left for three months to do as much warping as they would. Four of these that stood the test were ultimately selected. In the rather dry atmosphere of the Museum some little movement may be expected to take place, especially as there are no clasps to control the boards, but so far no appreciable distortion has been noticed.

White morocco covers The white morocco used for the covers was prepared by the alum and salt method which in medieval times produced binding-leather that has lasted better than any other. Although goatskin is slightly less dense than pigskin and has a rather softer surface, it has every appearance of being a serviceable covering for a very long time.

Tooled ornament By way of finish the leather on the boards is decorated with a little interlaced ornament tooled in blind. Strapwork of this kind is found on some early Coptic bindings, although the actual design used is not based on any particular example.

Lettering on spine The spine of each volume is lettered in gold from a fount designed by the late Sir Emery Walker.

APPENDIX I

SCRIBES OF THE CODEX VATICANUS

Difficulty of identifying scribes

In the Sinaiticus the shapes of individual letters have, owing to the vagaries of scribes, proved to be the least satisfactory criterion between hands that at all resemble each other. If this is true of the Sinaiticus it is doubly so of the Vaticanus, where the original script has been almost entirely overwritten by a later hand and the finer points of style practically obliterated. The investigator is therefore more than ever thrown back upon the other and less subjective tests which have proved so effective in discriminating the scribes of the Sinaiticus. Some of these tests have long been applied to the Vaticanus, for instance by Ezra Abbot in an article on the 'Comparative Antiquity of the Sinaitic and Vatican MSS.', contributed to the *Journal of the American Oriental Society*, x, 1872, pp. 189–200. Abbot observed a complete change in two respects after p. 334, namely in the use of the filling sign and in the method of indicating a new paragraph, and he rightly deduced that the first hand stopped at the end of p. 334, in the middle of 1 Kings (1 Samuel) xix. 11, and that a new hand continued to the end of 2 Esdras (p. 624). On the rest of the Vaticanus and its scribes Abbot made no pronouncement, nor indeed would his criteria alone have sufficed for an absolute decision. Such proof had to wait for a fuller evaluation of the colophon designs, the evidence of which, as will be seen from the tables below, is amply corroborated by the subsidiary counts.

Search for criteria

Value of colophon-designs

CHARACTERISTICS OF HAND A: GENESIS XLVI. 28—1 KINGS XIX. 11 (pp. 41–334), PSALMS—TOBIT (pp. 625–944)

Hand A

1. *Colophons*: A invariably uses the running spiral ~~~~ either in the actual design of the coronis or as a finish to the last line of the text. He keeps normally to the same pattern of coronis as scribe D of the Sinaiticus, but occasionally uses running spirals in the upright as at the end of Psalms. Twice, in Leviticus and Numbers, he employs a columnar device resembling those of B in the Sinaiticus, but in each case places it so low that the upright and cross-bar no longer embrace the text.

2. *Titles*. In the lines framing the subscriptions A never uses the tailed bar ⊤.

3. *Filling sign* >. Extremely frequent with A (in which particular he again resembles D of the Sinaiticus), but only in the prose books. There is not the same call for it in the Poetical books, which are written stichometrically in lines of unequal length.

4. *Paragraphs*. A in prose always begins a new paragraph with a new

line. In this respect we may compare Hand II of the Alexandrinus. The Poetical books, written stichometrically, naturally follow different rules.

5. *Projection.* A in prose regularly projects the first letter of the new paragraph into the margin.

6. *Paragraphus sign.* A in prose makes no use of this sign, but employs it in the Poetical books to mark divisions of various sorts.

CHARACTERISTICS OF HAND B: I KINGS XIX. 11 — 2 ESDRAS (pp. 335–624), HOSEA—DANIEL (pp. 945–1234), NEW TESTAMENT (pp. 1235–1518)

Hand B

1. *Colophons.* B avoids the running spiral,[1] replacing it, if at all, with variations of herring-bone design. He uses three types of coronis, two like A's but easily distinguishable from his. Notably, B's columnar devices occupy the normal coronis position. His third type, based on horizontal strokes of various lengths, appears first with Hosea and runs intermittently through the Prophets and the New Testament.

2. *Titles.* In the lines framing the subscriptions B frequently, if not invariably, uses the tailed bar.

3. *Filling sign.* Avoided by B in the Historical books and the New Testament, apart from its triple occurrence on p. 571 and its single occurrence on p. 1404 (col. 1, l. 15). In the Prophets he uses it sporadically, but not with the profusion of A.

4. *Paragraphs.* B in the Historical books writes straight on, indifferent whether he begins his new paragraph within the line after a punctuation space, or with a new line. In the Prophets, on the other hand, he emphasizes the main divisions by beginning a new line, and in the New Testament, especially in Matthew, he breaks up the text considerably in this manner, but later on falls back into his more continuous style.

5. *Projection.* B's usage varies. In the Historical books he only twice projects the first letter of a new paragraph (pp. 343, 484), but normally keeps it flush with the column. In the Prophets he projects the first letter of the main divisions; in the New Testament he at first frequently projects the new paragraph but gradually abandons the device. No example occurs in John, only two in Acts, none afterwards.

6. *Paragraphus sign.* B normally accompanies a new paragraph with this sign, unless when the first letter projects into the margin.

OTHER CRITERIA

Test of nomina sacra

There remains another possible criterion, namely the practice of contracting certain words. Abbot applied this test with the word πνεῦμα to distinguish the two hands in the Historical books. He found that in 40

[1] The unique exception, in the cross-bar of the colophon to Romans, is drawn in the reverse way to A's.

out of 42 occurrences (actually in 41 out of 44, if we include the two instances of the plural) A uses the contracted form πνα, while B on the contrary contracts only in one instance out of 41. The numbers for the New Testament, written by B, are 13 contractions out of 340. Five of these lead off in succession,[1] after which B falls into his normal swing with 8 out of 335, and of these one occurs in a marginal correction. So far so good; but the Prophets, also written by B, show a complete reversal, contracting in 123 out of 132 instances. The change in this particular is paralleled by the change of habit in the use of the filling sign and the treatment of the new paragraph. Indeed, were it not for the absolute evidence of the colophons one might be tempted to suspect a third hand, as for the same books in the Sinaiticus. Tischendorf actually did distinguish three hands,[2] but gives no details (*Novum Testamentum Vaticanum*, 1867, p. xxi, note 2, and *Appendix Codicum Celeberrimorum*, p. viiii). In the Poetical books we need not be so surprised to find a change of habit, as the conditions are peculiar, stichometrical arrangement and two instead of three columns to the page, thus allowing more room. Out of 96 instances in Psalms—Job, A contracts only 52. Here again the incidence is striking, as he starts with a succession of 18 uncontracted forms but sinks later into his more natural ways. With the prose books Esther—Tobit we are back at a more normal proportion, 7 contractions out of 8. It is thinkable, of course, that B was responsible for the first part of the Psalms, just as in the Sinaiticus they are divided between two hands, but the other tests are not here operative. However, the colophon (and therefore the immediately preceding text also) was certainly written by A.

Vagaries of scribes

Possibility of a third hand

Contractions apart, the ordinary spelling habits of each scribe might provide additional criteria. Take for example the way in which the spelling of the dative of ἰσχύς varies between ἰσχύι, the correct form, and ἰσχύει:

Characteristic spellings

Scribe A: ἰσχύι 3 times, ἰσχύει 37 times.

Scribe B: ἰσχύι 35 times, ἰσχύει 2 times.

Or taking the word ὅριον in all its forms, we find that A frequently substitutes ει for ι, B never.

HAVE B AND ℵ A SCRIBE IN COMMON?

Tischendorf's famous proposal[3] to identify the scribe of the New Testament in the Vaticanus (Hand B) with scribe D of the Sinaiticus gains no support from the evidence above presented. Actually, we have seen, the

[1] Hence Traube, *Nomina sacra*, pp. 66–7, postulated a change of hand after Matthew ix. 5.

[2] Cf. Traube, l.c., 'es sind 4 oder wahrscheinlich 3 Schreiber zu unterscheiden'.

[3] *Appendix Codicum Celeberrimorum*, pp. viiii–xi, repeated more briefly in *Novum Testamentum Vaticanum*, pp. xxi–xxiii.

affinities of D are with Hand A of the Vaticanus,[1] as evinced by the colophon and running spiral, the use of >, the treatment of the new paragraph (although in this last respect D does admit exceptions, e.g. O.T. 30^b, 58). This resemblance is certainly enough to give us pause, and it is equally striking in the activities of the two hands as correctors. We have only to turn to the marginal notes on pp. 1219, 1222 of the Vaticanus and N.T. 2^b of the Sinaiticus, where the similar reversed arrows with disjoined shafts, the use of the cursive directions ανω and κατω, and the identical appearance of the contraction for the latter, κ͡α, confront us. Or again we may examine, on p. 1227 of the Vaticanus and N.T. 9^b of the Sinaiticus, the triangular shape of the notes with diminishing lines. In spelling, too, D shares many of Vaticanus A's peculiarities, for example, his fondness for ἰσχύει, instead of ἰσχύι, and in general he maintains an almost identical standard of accuracy. Even so, it would be hazardous to argue identity of the two hands (for one thing D's use of the long-pronged omega in corrections seems an obstacle), but the identity of the scribal tradition stands beyond dispute.

Some remarkable resemblances

Certainly not attainable

[1] Traube, l.c., does indeed say that Tischendorf equated scribe D with Hand A of the Vaticanus, but this is presumably a slip.

APPENDIX II

SCRIBES OF THE CODEX ALEXANDRINUS

THE scribal problems of this manuscript lie entirely in the New Testament. In the Old Testament the situation is clear, and the text can be apportioned with certainty between two hands, to the second of which the Clementine Epistles at the end of the New Testament can with equal certainty be assigned. Kenyon, in his introduction to the New Testament album of the reduced facsimile of the Codex Alexandrinus (1909) postulates three entirely new hands for the New Testament, making five hands in all for the whole codex. This, if the case, would stand in striking contrast to the Vaticanus and the Sinaiticus, in both of which the New Testament is written by a hand or hands engaged on the Old Testament.

Room for doubt in N.T. only

Kenyon's five hands

It is in this connexion that the argument from the colophon designs becomes of prime importance. It has seemed desirable, therefore, to reproduce in colour all the colophons of the manuscript (Pls. 10–43) and make the evidence accessible to the student, as owing to the greater intricacy and variety of the types they cannot be so simply described and classified as those of the Sinaiticus and Vaticanus. Moreover, by the lithographic process in two colours their artistic merit has been fully revealed.[1]

CHARACTERISTICS OF HAND I: OCTATEUCH (ff. 1–160^b), PROPHETS (ff. 277–417), 1—4 MACCABEES (ff. 470–522^b), JOB—ECCLESIASTICUS (ff. 570–639^b).

1. *Colophons.* In Job, Proverbs, Song of Songs, and Wisdom, the coronis is still recognizable as such, but has sunk to a lower position than in the Vaticanus and Sinaiticus, so that the cross-bar runs beneath the subscription. The colophons in the other books have lost all semblance of a coronis, and are half-way (some indeed the whole way) to the later panel-form of tail-piece. In contrast to II this scribe uses a great variety of designs based on a definite range of elements, which can be studied in the reproductions.

2. *Delta.* As a rule the base projects markedly beyond the struts.

3. *Pi.* In addition to the normal form, this hand uses on occasion a variety with cross-stroke prolonged on both sides of the uprights thus: ΠΠ. Examples as capitals occur sporadically ff. 49^b–498, and an outcrop as small letters in the first two pages of 1 Maccabees (ff. 470, 470^b) and sometimes elsewhere, e.g. Proverbs, f. 588, col. 1, ll. 1–3. This variation in form is important when we come to deal with script IV of the New Testament.

[1] All the colophons of the Old Testament have been accurately reproduced in Baber's monumental edition, but only Job, Proverbs, Song of Songs, and Wisdom are in colour. The New Testament colophons have never been reproduced before.

4. *Contraction of* αι. Besides κ(αί) this hand frequently contracts τ(αι), e.g. παρακληθησετ(αι) f. 123, and occasionally other syllables, e.g. λαλησ(αι) f. 36.

5. *Paragraphs.* This hand is indifferent whether the new paragraph begins with a new line or not.

6. *Quire numeration.* The figures are framed, above and below, by flourishes, which are provided even when the numeral has not been added or added later. A design sometimes takes the place of the lower flourish, as on ff. 293 (jug), 349 (rectangle), 357.

7. *Orthography.* A good criterion is provided by the word ἔλεος, which is always spelled correctly by this scribe and throughout the New Testament (although ἀνέλεος in James ii. 13, a unique word, is written αναιλεος).

CHARACTERISTICS OF HAND II: KINGS AND CHRONICLES (ff. 161–276^{b}), ESTHER—2 ESDRAS (ff. 418–469^{b}), PSALMS, WITH LETTER OF ATHANASIUS AND CANTICLES (ff. 523–569^{b}), CLEMENTINE EPISTLES (NEW TESTAMENT, ff. 159–169^{b})

1. *Colophons.* Only one pattern employed, of hooks and spirals, recognizably different from the same pattern when employed by I. For one thing the spiral is normally more elaborate and suspended more carefully to the hooks.

2. *Upsilon.* Unmistakable with its wide hollow fork and square clubbing of the tips.

3. *Omega.* The form with long central prong (ѡ) occurs not infrequently at the end of lines (cf. pp. 24–6 above). There is no example in the Clementines, but we may remember similar caprices in the Sinaiticus.

4. *Contraction of* αι. Only in κ(αί). Apparent exceptions are found solely in corrections by the diorthotes, who in some cases at least is I, e.g. υψωθησοντ(αι), f. 549.

5. *Paragraphs.* This hand never begins a new paragraph within the line, but always starts a fresh line.

6. *Quire numeration.* The figures never have the elaborate flourishes of the other hand and are never accompanied by designs.

7. *Orthography.* ἔλεος is mis-spelled ελαιος in at least two cases out of every three, both in the Old Testament and in the Clementines.

8. *Titles.* In the decorative over-lines to subscriptions we never get the type seen e.g. in Leviticus with the lines diminishing towards the title.

SCRIPTS OF THE NEW TESTAMENT

Kenyon's three hands in the N.T.

The three fresh hands identified by Kenyon in the New Testament bear a striking resemblance to each other in the formation of the individual letters and to I above. Although this criterion can be fallacious it is borne out by other, less subjective, points of agreement—particularly the colophon

types, the surviving flourishes and designs of the original quire numerations (mostly much cropped), the new-paragraph habits, and orthography—the cumulative effect of which is impressive and leads almost unavoidably to the conclusion that all four, in spite of surface discrepancies, are the work of one scribe. The main obstacle to this identification is presented by script IV, where a more spacious and more delicate style, induced perhaps by a finer pen and a new ink, is accompanied by the sudden and complete adoption of the pi with long cross-stroke for small as well as for capital letters. But the pi phenomenon we have already observed to a smaller extent in 1 Maccabees and Proverbs, both written by I. Moreover, this test breaks down within IV itself, as the normal form is with equal suddenness adopted for small letters after f. 120 (from which point the hand approximates to III), three pages before the end of the section. We may also note that III and IV write ϊμι for ειμι only once, but curiously enough in the same context: οὗ οὐκ εἰμὶ ἱκανός = Mark i. 7, Luke iii. 16. They both write εκχθρους for εχθρους once. Phonetically, indeed, the three New Testament scripts are indistinguishable. If our conclusion is true we are left with only two hands for the whole codex, which thus falls completely into line with the Vaticanus in this respect. The quoted details below are taken from Kenyon:

Their possible identity with each other and with Hand I

Only two hands in the whole MS.?

III. Matthew, Mark (with table of κεφάλαια to Luke), 1 Cor. x. 8–Philemon (Hebrews precedes Pastoral Epistles); ff. 26–43^{b}, 122–49.

Details of N.T. scripts

This hand 'bears some resemblance to I, but is assuredly not the same. The letters are a trifle taller, the writing is compacter, the space between both lines and letters less'. Agrees with I in points 1, 2, 3 (but never has the long cross-stroke in pi minuscule), 4, 5, 6 (diaper f. 33, plant f. 41, flourishes ff. 135, 142), 7.

IV. Luke–1 Cor. x. 8 (including Catholic Epistles, which follow Acts); ff. 44–121^{b}.

'This is a smoother, softer, lighter hand, and the ink is a reddish-brown. . . . Capital letters are rather small. Paragraphs often begin in the middle of a line (as is also the case in III). A noticeable letter is pi, the cross-stroke of which is regularly prolonged on both sides of the perpendiculars, while in III this is not the case.' Agrees with I in points 1, 2, 3 (with different proportion), 4, 5, 6 (flourish f. 92, diaper f. 106 as offset on f. 105^{b}), 7.

V. Revelations; ff. 150–58^{b}.

'A new hand begins the Apocalypse. . . . The ruled column of writing here becomes broader and the hand is rather smaller and thicker.' Agrees with I in points 1, 2, 5, 6 (flourish f. 150).

TABLE OF CONCORDANCE

THE following table equates in the final columns: (1) the numeration of Kirsopp Lake's facsimile, (2) the present foliation of the manuscript, the portion in Leipzig (Codex Friderico-Augustanus) being differentiated from that in the British Museum (Codex Sinaiticus) by the use of Roman numerals, and (3) the numeration of Tischendorf's *editio princeps* of the Sinaiticus (1862). It has not been thought necessary to include the volume-numbers either in the case of Lake's facsimile (two volumes, Old and New Testament, with separate numeration) or in that of Tischendorf's *editio princeps*, of which the facsimile occupies vols. II–IV, containing respectively the Historical and Prophetic books, the Poetical books, and the New Testament, each with separate numeration.

BOOK		SCRIBE	QUIRE	KIRSOPP LAKE	B.M. OR LEIPZIG FOLIATION	TISCHENDORF
Genesis	23. 19—24. 19 (fr.) 24. 25—24. 46 (fr.)	D	..	1 1*	.. ..	.. ..
Numbers	5. 26—6. 18 (fr.) 6. 22—7. 20 (fr.)	A	..	2 2*	.. ..	.. ..
I Chronicles	9. 27—10. 11 10. 11—11. 22	A	34^{8}	3 3*	I 1^{b}	I 1*
I Chronicles	11. 22—12. 17 12. 17—13. 2	A	35^{1}	4 4*	i i^{v}	.. ..
I Chronicles	13. 2—14. 16 14. 16—15. 27	A	35^{2}	5 5*	ii ii^{v}	.. ..
I Chronicles	15. 27—16. 33 16. 33—17. 16	A	35^{3}	6 6*	iii iii^{v}	.. ..
I Chronicles–II Esdras	17. 16—18. 15 18. 16—19. 17; II Esdras 9. 9—9. 11	A	35^{4}	7 7*	iv iv^{v}	.. ..
II Esdras	9. 11—10. 14 10. 14—11. 3	A	35^{5}	8 8*	v v^{v}	.. ..
II Esdras	11. 3—12. 10 12. 10—13. 13	A	35^{6}	9 9*	vi vi^{v}	.. ..
II Esdras	13. 13—14. 7 14. 7—15. 5	A	35^{7}	10 10*	vii vii^{v}	.. ..
II Esdras	15. 5—16. 7 16. 7—17. 13	A	35^{8}	11 11*	viii $viii^{v}$	.. ..
II Esdras	17. 14—17. 67 17. 67—18. 15	A	36^{1}	12 12*	ix ix^{v}	.. ..
II Esdras	18. 15—19. 15 19. 15—19. 31	A	36^{2}	13 13*	x x^{v}	.. ..
II Esdras	19. 31—20. 31 20. 31—21. 15	A	36^{3}	14 14*	xi xi^{v}	.. ..

BOOK	SCRIBE	QUIRE	KIRSOPP LAKE	B.M. OR LEIPZIG FOLIATION	TISCHENDORF
II Esdras — 21. 16—22. 37 . . .	A	36^{4}	15	xii	..
II Esdras — 22. 37—23. 15 . . .			15*	xii^{v}	..
II Esdras–Esther — 23. 15—23. 31 (end); Esther A. 1—9.	A	36^{5}	16	xiii	..
II Esdras–Esther — A. 9—1. 15			16*	xiii^{v}	..
Esther — 1. 15—2. 14	A	36^{6}	17	xiv	..
Esther — 2. 14—3. 12			17*	xiv^{v}	..
Esther — 3. 12—4. 8	A	36^{7}	18	xv	..
Esther — 4. 8—C. 16			18*	xv^{v}	..
Esther — C. 16—D. 13	A	36^{8}	19	xvi	..
Esther — D. 13—6. 11			19*	xvi^{v}	..
Esther — 6. 11—8. 8	A	37^{1}	20	xvii	..
Esther — 8. 8—E. 17			20*	xvii^{v}	..
Esther — E. 17—9. 16	A	37^{2}	21	xviii	..
Esther — 9. 16—F. 6			21*	xviii^{v}	..
Esther–Tobit — F. 6—11 (end); Tobit 1. 1—7	A†, D	37^{3}	22	xix	..
Esther–Tobit — 1. 7—2. 2			22*	xix^{v}	..
Tobit — 2. 2—3. 6	D	37^{4}	23	2	2
Tobit — 3. 6—4. 3			23*	2^{b}	2*
Tobit — 4. 3—5. 10	D	37^{5}	24	3	3
Tobit — 5. 11—6. 6			24*	3^{b}	3*
Tobit — 6. 6—6. 18	D	37^{6}	25	4	4
Tobit — 6. 18—7. 17			25*	4^{b}	4*
Tobit — 8. 1—9. 2	D	37^{7}	26	5	5
Tobit — 9. 2—10. 12			26*	5^{b}	5*
Tobit — 10. 12—11. 16 . . .	D	37^{8}	27	6	6
Tobit — 11. 16—13. 2 . . .			27*	6^{b}	6*
Tobit — 13. 2—14. 4	D	38^{1}	28	7	7
Tobit — 14. 4—14. 15 . . .			28*	7^{b}	7*
Tobit–Judith — 14. 15 (end); Judith 1. 1—14	D	38^{2}	29	8	8
Tobit–Judith — 1. 14—2. 22			29*	8^{b}	8*
Judith — 2. 22—4. 7	D	38^{3}	30	9	9
Judith — 4. 7—5. 11			30*	9^{b}	9*
Judith — 5. 11—6. 6	D	38^{4}	31	10	10
Judith — 6. 7—7. 6			31*	10^{b}	10*
Judith — 7. 6—7. 25	D	38^{5}	32	11	11
Judith — 7. 25—8. 11			32*	11^{b}	11*
Judith — 8. 11—8. 32	D	38^{6}	33	12	12
Judith — 8. 32—9. 14			33*	12^{b}	12*
Judith — 9. 14—10. 19	D	38^{7}	34	13	13
Judith — 10. 19—11. 13 . . .			34*	13^{b}	13*
Judith — 11. 23—12. 3; 12. 5—9 .	D	38^{8}	35	Society of Ancient Literature, Leningrad	
Judith — 12. 11 (?)—13; 12. 14—16 .			35*		

† A to the end of Esther only.